



**GEORGIA**  
DEPARTMENT OF  
**EDUCATION**

Kathy Cox, State Superintendent of Schools

**Training for the New  
Georgia Performance  
Standards**

Day 5: Differentiation

**Content Facilitator's Guide  
Mathematics Grade 7**

*We will lead the nation in improving student achievement.*

## ***Use of This Guide***

This training program was developed by the Georgia Department of Education as part of a series of professional development opportunities to help teachers increase student achievement through the use of the Georgia Performance Standards.

The module materials, including a Content Facilitator's Guide, Participant's Guide, and PowerPoint Presentation are available on a CD to designated trainers throughout the state of Georgia who have successfully completed a Train-the-Trainer course offered through the Georgia Department of Education. These trainers have also received supplementary materials.

Materials (guides, presentations, etc.) will be available electronically on <http://www.georgiastandards.org> under the training tab after all trainings of Day 5 have occurred. Consult the trainer for availability.

For more information on this or other GPS training, contact Claire Pierce at (404) 657-7063 or [cpierce@doe.k12.ga.us](mailto:cpierce@doe.k12.ga.us) or Peggy Pool at (404) 657-9063 or [ppool@doe.k12.ga.us](mailto:ppool@doe.k12.ga.us).

## ***Specialists' Contact Information***

**For a list of district coordinators visit the Georgia Learning Connection:**

English Language Learners

<http://www.glc.k12.ga.us/contact/contact.asp?groupname=ESOL+District+Coordinators>

Gifted and Talented

<http://www.glc.k12.ga.us/contact/contact.asp?groupname=Gifted+Education>

**For specialists at the Georgia Department of Education:**

English Language Learners—Andrea Mirtalebi

[amirtale@doe.k12.ga.us](mailto:amirtale@doe.k12.ga.us)

Gifted and Talented—Linda Andrews

[lindrew@doe.k12.ga.us](mailto:lindrew@doe.k12.ga.us)

Exceptional Students (Special Education)—Marlene Bryar

[mbryar@doe.k12.ga.us](mailto:mbryar@doe.k12.ga.us)



## Table of Contents

<b>Use of This Guide and Specialists' Contact Information</b> .....	<b>2</b>
<b>Table of Contents</b> .....	<b>3</b>
<b>Overview</b> .....	<b>4</b>
<b>Agenda</b> .....	<b>7</b>
<b>Introduction to Differentiation</b> .....	<b>8</b>
<b>What is Differentiation?</b> .....	<b>13</b>
<b>Why and How Do We Differentiate?</b> .....	<b>18</b>
<b>The Differentiated Classroom</b> .....	<b>25</b>
<b>Resources</b> .....	<b>33</b>
Jumping Jacks .....	56
Underlying Assumptions .....	60
Equalizer .....	61
Math "Coordinated".....	62
True/False Quiz .....	68
Traditional vs Differentiated Classrooms .....	69
Name That Graph .....	70
Low-Prep and High-Prep Strategies .....	75
Redelivery Action Plan .....	76
Assignments for Days 6 and 7 .....	77
Permission Forms for Student Work .....	78



## Overview

### Day 5

By the end of Day 5 of training, participants will be able to:

1. Define differentiation and explain the importance of differentiation in the standards-based education process.
2. Explain key elements in planning for differentiation.
3. Describe and develop procedures for differentiating instruction in a flexible classroom.
4. Describe and develop effective classroom management strategies in a differentiated classroom.
5. Describe the roles of the teacher in a differentiated classroom.
6. Set individual goals for differentiating instruction in each classroom.
7. Cultivate a strong awareness of standards-based teaching and learning.
8. Become familiar with the 7<sup>th</sup> grade mathematics GPS along with the expected depth and rigor.
9. Have a deeper understanding of the content addressed within the module.

**Module Sequence**

Prior to redelivery of this module, you might have your participants read Carol Ann Tomlinson's "Mapping a Route Toward Differentiated Instruction." *Educational Leadership* 57.1 (Sept. 1999): 12-16. [http://pdonline.ascd.org/pd\\_online/diffinstr/el199909\\_tomlinson.html](http://pdonline.ascd.org/pd_online/diffinstr/el199909_tomlinson.html).

## Introduction to Differentiation

- Four Corners
- Calvin's Day at School
- Jumping Jacks

## What is Differentiation?

- What is it?
- Standards-Based Education Model
- Self-Assessment

## Why and How Do We Differentiate?

- Why do we differentiate?
- How do we differentiate?
- Math "Coordinated"
- Differentiation Stratego: A Reality Game

## What Does a Differentiated Classroom Look Like?

- True/False Quiz: What Does Differentiation Look Like?
- Name That Graph
- Setting Personal Goals for Differentiating

## Summary and Field Assignment

**Module  
Materials for  
Day 5 of  
Training****Content Facilitator's Kit contents:**

- Hard copy of the Content Facilitator's Guide (one for each leader)
- CD containing the Content Facilitator's Guide, Participant's Guide and Power Point presentation of the seventh grade mathematics Day 5 Module.

## Other materials needed:

- Name tags
- A variety of colored markers appropriate for flipcharts
- Highlighter markers
- Flipchart paper and stand
- Masking tape to post chart paper
- Stop Watches
- Sticky Notes
- Compasses
- Straightedges
- Cardboard
- Colored pencils
- Post-it Notes
- 3x5 lined index cards
- Extra graph paper
- Extra unlined paper

## Equipment:

- Projection system for slides
- Computer

**Days 3 and 4  
Follow Up/ Day  
5 Preparation**

If possible, have participants bring a school copy of the Carol Ann Tomlinson book, *How to Differentiate Instruction in Mixed-Ability Classrooms*. These were sent to schools during Phase I. Also remind them to bring the notebook from Days 1 through 4 of training.

## **Agenda**

### Introduction to Differentiation

- Four Corners
- Calvin's Day at School
- Jumping Jacks

### What is Differentiation?

- What is it?
- Standards-Based Education Model
- Self-Assessment

### Why and How Do We Differentiate?

- Why do we differentiate?
- How do we differentiate?
- Math "Coordinated"
- Differentiation Stratego: A Reality Game

### What Does a Differentiated Classroom Look Like?

- True/False Quiz: What Does Differentiation Look Like?
- Name That Graph
- Setting Personal Goals for Differentiating

### Summary and Field Assignment

## Introduction to Differentiation

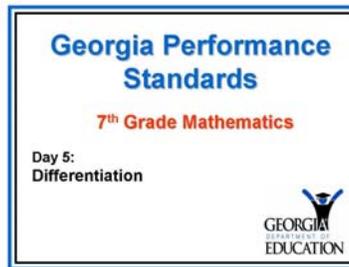
<b>Overview</b>	In the introduction, the participants share their preconceptions about differentiation and relate these preconceptions to Carol Ann Tomlinson's statements about differentiation. Then, the group reviews Stages One, Two, and Three of the Standards-Based Education Process and examines the importance of differentiation in this process.
<b>Objectives</b>	<ul style="list-style-type: none"> <li>➤ Define differentiation and explain the importance of differentiation in the standards-based education process.</li> <li>➤ Explain key elements in planning for differentiation.</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>➤ Four Corners</li> <li>➤ Calvin's Day at School</li> <li>➤ Jumping Jacks</li> </ul>
<b>Materials</b>	<ul style="list-style-type: none"> <li>➤ Overhead projector or computer and LCD projector</li> <li>➤ Transparencies or PowerPoint presentation</li> <li>➤ Participant's Guide</li> <li>➤ Lined 3x5 index cards</li> <li>➤ Stop Watches</li> </ul>

Prior to the arrival of the participants, be sure to have the modules, nametags, note cards and books on the tables. Also, have the parking lot posted.

Show title slide and welcome participants to training.

This is a good time for participants to briefly introduce themselves.

Title Slide



Name tags

Ask participants to put their name on a name tag and to fill out a "GPS status" means that they have attended last year's training in Days 1-4 for mathematics, they have attended redelivery of mathematics, they have heard about the GPS, or they have no previous experience with GPS.

Lined 3x5 index cards

Slides

*Getting Acquainted*  
and  
*Contact information*



This is a good time to discuss the group norms.

Slide

*Group Norms and Housekeeping*



## What Do We Know and What Do You Want to Know: Large Group Activity

Four Corners Game

Flipcharts, markers

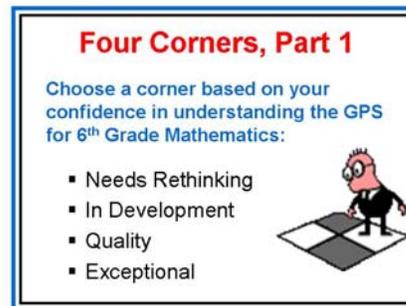
Everyone will stand after the corners have been labeled.

Show Four Corner slides.

Ask participants to move to the corner that most closely matches their confidence level in understanding the GPS.

Slide

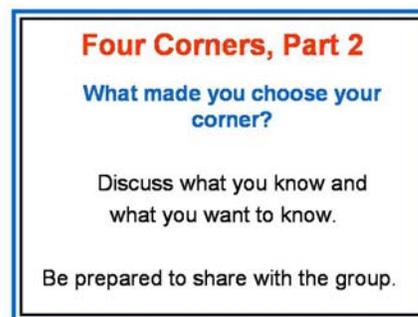
*Four Corners, Part 1*



Show slide, *Four Corners, Part 2*. Ask what made them choose that particular corner. Have them discuss among themselves about what they know and want to know

Slide

*Four Corners, Part 1*



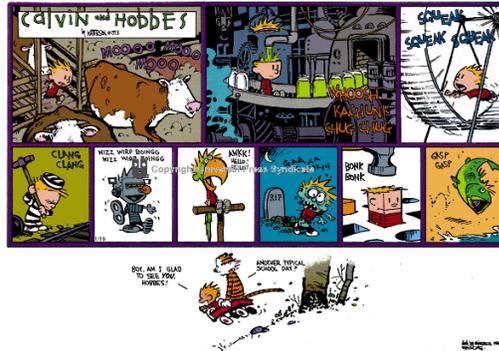
Ask for volunteers to share. During the sharing, someone should record the responses on posted chart paper.

Briefly note any patterns that you see and/or any items that may be listed on both sides of the room, then tell participants that we will get back to these lists throughout the day.

- **Let's take a minute to view a Calvin and Hobbes comic strip.**

Slide  
*Calvin & Hobbes*  
cartoon

Show one slide at a time and allow participants to identify with Calvin's feelings.



**What general statements might we make about Calvin's day?** [Allow time for participants to respond.]

Responses may include things like you have been herded along, goo has been poured into your brain, you have been running in circles, you are a prisoner doing manual labor, you are just a robot going through programmed motions, you are just repeating what you have heard, you are scared to death, you have been forced into a mold, you were a fish out of water.

**Can you imagine how a student might feel like this sometimes at school?**

- **Does it appear that Calvin's educational needs are being met? Why or why not?** [Allow time for participants to respond.]

PG page 37  
FG page 56

Slide  
*Jumping Jacks*

**We have not done any math yet today!**  
**Take a look at the "Jumping Jacks" task found in the back of your guide.**

**Jumping Jacks**

- The popularity of bicycle tours gave five college students an idea for a summer business.
- You cannot ride your bike around the classroom, but you can perform a simple experiment.

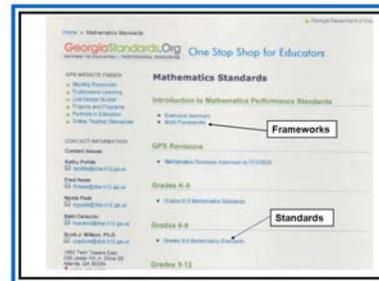
**KEY:** M7A1, M7A2, M7A3, and M7D1  
**Related:** All PS

Participants will complete this task in groups of four. Afterwards, they will discuss and share their results and discuss the standards that are addressed within the task.

Since this task comes from Unit 2 of the Grade 7 Framework on the web, this is an excellent time to introduce georgiastandards.org.

Participants should understand how to find the training materials necessary for redelivery by using the GADOE website along with the standards, frameworks, parent letters, webcasts and other items to come.

Slides  
 georgiastandards.org



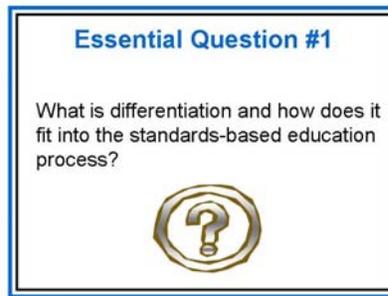
How to locate information on the web site www.georgiastandards.org.

- **Training Materials (Guides, Power Points, etc.) are found here after all training sessions are completed.**
- **Frequently Asked Questions (FAQs)**
- **List of standards for applicable content area and grade level**
- **Frameworks**
- **Parent letters**
- **Webcasts**
- **Videos are coming**

<b><i>What is Differentiation?</i></b>	
<b>Overview</b>	This section will focus on the definition of differentiation. Topics of discussion will include what it is and how it relates to standards-based teaching and learning. Participants will have an opportunity to self-assess themselves about how they differentiate instruction. The essential principles of differentiation will be summarized.
<b>Objectives</b>	<ul style="list-style-type: none"><li>➤ Define differentiation and explain the importance of differentiation in the standards-based process.</li><li>➤ Set individual goals for differentiating instruction in each classroom.</li></ul>
<b>Activities</b>	<ul style="list-style-type: none"><li>➤ What is it?</li><li>➤ Self-Assessment</li><li>➤ Task review</li></ul>
<b>Materials</b>	<ul style="list-style-type: none"><li>➤ Chart paper and markers</li><li>➤ Transparencies or PowerPoint presentation</li><li>➤ Participant's Guide</li></ul>

Show slide, Essential Question 1.

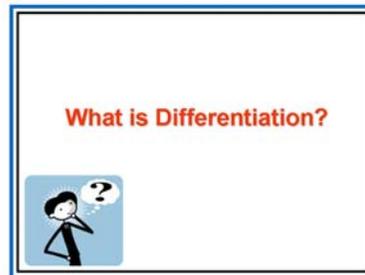
Slide  
*Essential Question 1*



## Defining Differentiation

Slide  
*What is Differentiation?*

Show *What is Differentiation?* slide:



Flip chart with responses and concerns.

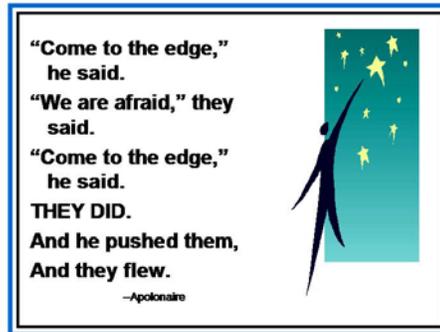
- This is time for a good discussion with responses posted on chart paper.
- Be sure that the responses include adaptations to what we teach, how we teach and how students learn, and how students show what they have learned.
- **What does it mean when we say differentiation is “a way of teaching?”**
- Allow participants to respond. Summarize responses and conclude: **Differentiation is not merely a single strategy or bag of tricks we can pull from. Differentiation is more of a philosophy that requires us to rethink teaching and learning in order to understand not only what to do but also why it matters . . . to rethink not only our instructional decision-making but also the learning environment and what our classrooms look and feel like . . . to rethink everything we do in light of the potential for the academic growth of all students.**

- In a differentiated classroom we modify curriculum, teaching methods, resources, learning activities, and student products **PROACTIVELY**.

Show slide: *Come to the edge.*

Slide

*Come to the edge.*

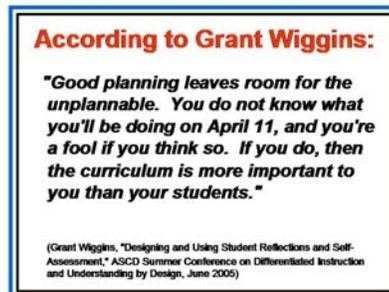


- What are your thoughts, reactions and feelings about this quote?
- How does it relate to what we have been discussing about differentiation within the classroom?

Show slide, *Grant Wiggins' quotation.*

Slide

*Grant Wiggins' quotation*



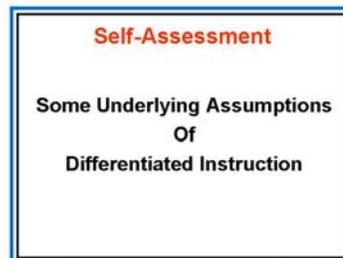
- At the ASCD conference on differentiation held in New York the last week of June year before last, Grant Wiggins stated that *“Good planning leaves room for the unplannable. You do not know what you’ll be doing on April 11, and you’re a fool if you think so. If you do, then the curriculum is more important to you than your students.”*

Mention the Northey book that trainers received during sixth grade training last year.

- **Wiggins may be exaggerating; he certainly advocates planning instruction at the course and unit levels, so he's not saying we shouldn't plan. However, the message here is clear: in a differentiated classroom, teachers intervene and adjust instruction to meet the needs of the learners in that classroom; and that means using feedback from Monday's class to determine exactly what I need to do on Tuesday. Therefore, I will plan instruction carefully, but I must be willing to modify those plans to meet the needs of the students each day in my classroom.**
  
- **In the past few minutes we have touched on a number of ideas about diverse learners and differentiated instruction, and we will spend the remainder of today exploring many of these ideas. However, a thorough and comprehensive study of differentiation is beyond the scope of our workshop today. ASCD has prepared a series of materials on differentiation that will complement and enhance the information from today's training. This series, *At Work in the Differentiated Classroom*, Alexandria, VA: ASCD, 2001, includes three VHS tapes and a Facilitator's Guide. The videos provide clips of real differentiated classrooms and include commentary by Carol Ann Tomlinson. The facilitator's guide suggests formats for utilizing the videos and other materials. One set of these materials were provided to each local school system and each RESA. In addition, each system received one copy of *Differentiation in Practice, Grades K-5* and one copy of *Differentiation in Practice, Grades 5-9*. I strongly recommend that you use these resources to further your conceptual understanding of differentiation.**

Slide  
*Self-Assessment*

### Self-Assessment



Self-Assessment  
PG page 41  
FG page 60  
"Some Underlying  
Assumptions of  
Differentiated  
Instruction"

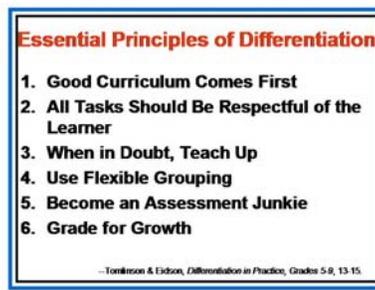
Slide  
*Essential Principles  
of Differentiation*

Reference Van De  
Walle book, p. 440:  
Multiple  
Representations'  
"Star"

**Read each assumption and assess your own "way of thinking about teaching" by marking the star if this assumption is implicit when planning instruction, the smiley face if you take this assumption into consideration in some way during planning and the question mark if you need to think about your practice in terms of this assumption. You have approximately 10 minutes for this activity.**

After approximately 10 minutes, say: **This pre-assessment is for your own use, but let's take a moment or two to debrief the activity and relate it to what we've looked at earlier this morning.**

Show slide: *Essential Principles of Differentiation.*



- **We've already discussed the importance of having a rigorous curriculum for all students.**
  - **What do you think we mean when we say that "all tasks should be respectful of the learner"?** [Allow participants to respond before going on.]
  - **To challenge every learner, Tomlinson says "when in doubt, teach up." What's your response?** [Allow participants to respond before going on.]
- Consider the Jumping Jacks task that we did earlier. Was that a task that allowed for differentiation? If so, in what ways? If not, what could have been done to allow for differentiation? What questions do you have concerning differentiation?**

Allow time for discussion.

Record vital points on chart paper and post for reference during the remaining training time for today.

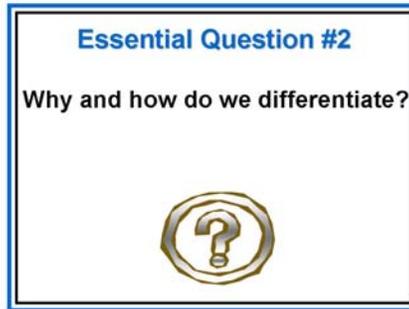
## ***Why and How Do We Differentiate?***

<b>Overview</b>	In this section will focus on the what, how, and why of differentiation. Topics of discussion will include readiness, student interests, and learning profiles; ways of differentiating content, process, product, and the learning environment; and access to learning, motivation to learn, and efficiency of learning. Participants will be provided with a guide for differentiating, and they will use this guide along with the information presented to prepare a plan for differentiating in a mixed-ability classroom.
<b>Objectives</b>	<ul style="list-style-type: none"> <li>➤ Explain key elements in planning for differentiation.</li> <li>➤ Describe and develop procedures for differentiating instruction in a flexible classroom.</li> <li>➤ Describe and develop effective classroom management strategies in a differentiated classroom.</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>➤ Why do we differentiate?</li> <li>➤ How do we differentiate?</li> <li>➤ Math “Coordinated”</li> <li>➤ Differentiation Stratego: A Reality Game</li> </ul>
<b>Materials</b>	<ul style="list-style-type: none"> <li>➤ Chart paper and markers</li> <li>➤ Transparencies or PowerPoint presentation</li> <li>➤ Participant's Guide</li> <li>➤ Sticky notes</li> <li>➤ Compasses</li> <li>➤ Straightedges</li> <li>➤ Cardboard</li> <li>➤ Colored pencils</li> <li>➤ Extra graph paper</li> <li>➤ Extra unlined paper</li> <li>➤ Cards, with profiles of individual students or groups of students</li> </ul>

## Why and how do we differentiate?

Slide  
*Essential Question 2*

Show slide: Essential Question 2.



- **In this section of today's workshop, we will look at a number of aspects of differentiation that will help us make informed decisions about differentiating in our classrooms.**

Show slide: Why Do We Differentiate?

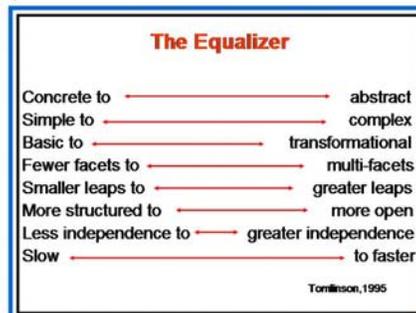
Slide  
*Why Do We Differentiate?*



A brief discussion of these reasons should occur. Among the reasons, participants should include something such as access to learning, motivation to learn, and efficiency of learning.

Show slide: The Equalizer.

Slide  
*The Equalizer*



PG page 42  
FG page 61

- Carol Ann Tomlinson has developed a tool to use in planning differentiated lessons. She calls this tool "The Equalizer."
- The equalizer provides a visual guide to help teachers create tiered tasks.
- Teachers can adjust the difficulty of a task or a product along several continua.
- Tomlinson notes that "by matching task difficulty with learner readiness, a teacher can provide appropriate challenge for a given learner at a given time" (*Differentiation in Practice, Grades 5-9, 235*).
- Let's examine the other continua in order to make sure we understand how they can be used to adjust the difficulty of a task or product.
- Allow time for participants to discuss and reach consensus regarding the other continua before moving on.
- You can find this Equalizer in the back of this guide.

**Now that we are in agreement as to why we need to differentiate within our classrooms, let us look at some suggestions as to how to do it.**

Show slide: How Do We Differentiate?

Slide  
*How Do We Differentiate?*



Participants will make a graphic organizer to support their thoughts concerning this.

**In your group, make a table on your chart paper as demonstrated on the slide.**

PG page 43

Slide  
*Differentiation*

In the Participant's Guide is a table set up like the one that the groups are to be completing. Information in the Participant's Guide and in the back section of this guide could be helpful with this activity.

Differentiation			
	What is it?	How to differentiate	Strategies to use
Content			
Process			
Product			
Learning Environment			

A Gallery Walk with sticky note comments would be appropriate here.

- **Classroom management is an integral part of the learning environment. In a differentiated classroom multiple activities may be taking place and multiple groups or other teaching/learning arrangements may operate at any one time.**
- **Consequently, it is imperative to have classroom protocols in place for everything from what to do upon first entering the classroom to how to move from activity to activity to what to do if you finish early.**
- **As discussed earlier today, Tape 2 of the ASCD set entitled *At Work in the Differentiated Classroom* focuses on classroom management. The DOE provided each system and each RESA with a set of these materials last year, and we recommend that you view this tape to learn more about classroom management in a differentiated classroom.**

List of classroom management strategies by Carol Ann Tomlinson.

Refer participants to tips listed in the Participant's Guide for a list of strategies for managing a differentiated classroom by Carol Ann Tomlinson. These are also in the back section of this guide.

## Practice Differentiation

**We have reached the time to apply what we have learned today.**

**Take some time to analyze the Math “Coordinated” Tasks that are included in the back of the guide.**

Slide

*Math “Coordinated”*

PG page 44

FG page 62

Compasses

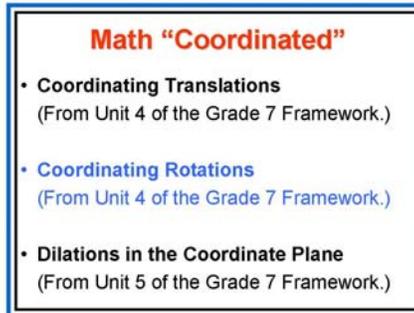
Straightedges

Cardboard

Colored pencils

Extra graph paper

Extra unlined paper



**It is time to practice differentiation.**

Encourage the participants to review some of the differentiation resources that have been supplied today and any that they may have brought with them.

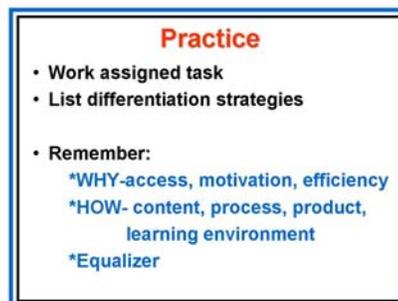
**You are to work the task that is assigned to your group.**

**After you have completed the task, make a list of appropriate differentiation strategies that could be used for the task.**

Remind participants to allow for differentiation of special education and gifted students in addition to the areas listed on the following slide.

Slide:

*Practice*



Allow about 15 minutes for the groups to complete this activity. Groups should split up and share what they have with delegates from the other groups. Then the original groups should report back what they have seen.

Be sure to have them include the standards that are addressed within the task.

KEY: M7G1, M7G2, M7G3

Related: M7N1, M7A1, M7A2, and M7A3 and all PS

Slide  
*Differentiation  
Stratego: A Reality  
Game*

## Differentiation Stratego: A Reality Game

Show slide: Differentiation Stratego: A Reality Game.



- **Establishing a differentiated classroom means taking into consideration the needs of the diverse learners in that classroom.**
- **One way to do this is to develop tiered tasks—that is, a number of versions of a single task adjusted for different learners or groups of learners, just as we saw in the guided practice.**
- **These adjustments take into consideration readiness, interests, and learner profiles. They provide different ways to access or process content, different types of products to provide evidence of understanding, and/or different learning environments including individual work, small group work, whole class work, and student/teacher conferencing.**

**We're going to practice differentiating via tiered tasks in this next activity.**

- **Use the “deck” of playing cards and the sample tasks provided, and follow the instructions to “play” Differentiation Stratego: A Reality Game.**

[Trainer's Note: Sample tasks and the student scenarios for the playing cards are printed at the end of the appendix in this Facilitator's Guide.]

- **Remember, differentiation is not the same as individualized instruction. We often differentiate for groups of students in a mixed-ability classroom.**

- **You will have approximately 30 minutes to work in your table groups to prepare your differentiation plan. Obviously this isn't enough time to plan as well as we might like, but you'll be surprised at the amount you can accomplish when you put your heads together.**
- Provide 10, 5, and 1 minute warnings. Distribute chart paper and designate a place for posting group work. As groups finish, provide tape for posting. When the time has expired, ask each group to share. Allow opportunity for other groups to comment on each presentation.

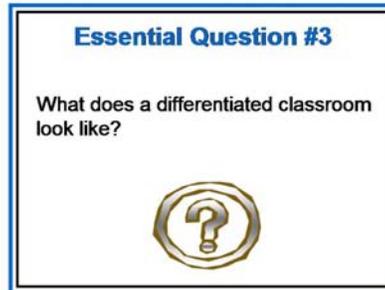
## ***The Differentiated Classroom***

<b>Overview</b>	<p>This section will focus on the various roles and responsibilities of the teacher in a differentiated classroom. We will examine areas in which we may need to rethink traditional ways of doing in order to maximize every student's opportunity to learn. We will look at a number of ways of differentiating that require low levels of preparation, as well as other means that require more preparation. Finally, we will develop individual action plans for moving toward differentiated classrooms.</p>
<b>Objectives</b>	<ul style="list-style-type: none"> <li>➤ Describe the roles of the teacher in a differentiated classroom.</li> <li>➤ Set individual goals for differentiating instruction in each classroom.</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>➤ True/False Quiz: What Does Differentiation Look Like?</li> <li>➤ Name That Graph</li> <li>➤ Setting Personal Goals for Differentiating</li> </ul>
<b>Materials</b>	<ul style="list-style-type: none"> <li>➤ Chart paper and markers</li> <li>➤ Transparencies or PowerPoint presentation</li> <li>➤ Traditional and differentiated comparison chart</li> <li>➤ Participant's Guide</li> <li>➤ 3x5 lined index cards</li> <li>➤ Cards with teacher metaphors</li> </ul>

## What Does a Differentiated Classroom Look Like?

Show slide: *Essential Question 3.*

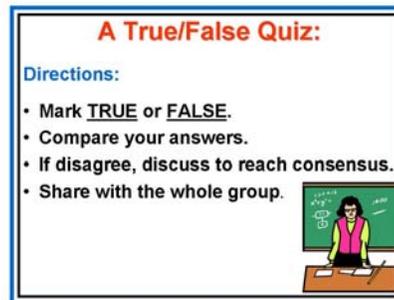
Slide  
*Essential Question 3*



## What Does Differentiation Look Like?: True/False Quiz

True/False Quiz.

Slide  
*True/False Quiz*



*True/False Quiz*

PG page 50  
FG page 68

- To introduce this section, we're going to take a brief True/False Quiz.
- You will find this quiz in the Participant's Guide and in the back of this guide.
- Review the answers with your group, then discuss them as a whole group.

You have 10-12 minutes for this activity and then we will compare our answers.

PG page 51  
FG page 69

In the back of your guide, you will find a chart that compares a traditional classroom to a differentiated classroom. Please turn to that chart.

- In your table groups, read through the characteristics of a traditional classroom.

Slide  
*Traditional vs.  
 Differentiated  
 Comparison Chart*

- **Next, read through the characteristics of the differentiated classroom.**

**Traditional vs. Differentiated**

- Read the characteristics
- Develop a **creative** demonstration
- Prepare to share

- **Be creative! Make this FUN! Develop a demonstration of the characteristics of the traditional classroom vs. the differentiated classroom.**

If at all possible, try not to give them too many hints. However, if they are really struggling, you may mention ideas such as a poem, prose, creative writing, song, art work, skit, role play, ect...

Allow about 10 minutes for this activity before sharing.

- **What conclusions might we draw from these similarities and differences?**
- Responses will differ, but expect such things as:
  - Teachers will have to be able to adapt.
  - Teachers will have to be much better prepared.
  - Teachers will have to be more flexible.
  - The day of the teacher being front and center in the classroom are over.
  - Teachers can no longer assume one size fits all.

Slide: *Name That Graph*

Slide  
*Name That Graph*

PG page 52  
 FG page 70

**Name That Graph**  
(Adapted from Unit 6 of the Grade 7 Framework.)

- Choose three equations and t-charts to graph.
- Answer the questions.
- Make sure to get tic-tac-toe.

Refer to the Northey book, page 130.

KEY: M7A3  
Related: M7N1, M7A1, M7A2, M7D1, and all PS

Slide  
*Essential Principles of Differentiation*

*Low-Prep and High-Prep Differentiation*

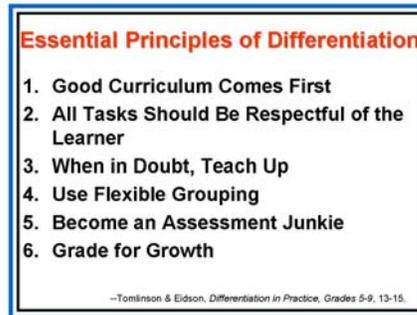
PG page 57  
 FG page 75

**This activity is adapted from the Name That Graph task that is in unit 6 of the Grade 7 framework. Choose three equations and t-charts to graph and answer the questions listed below.**

Give the participants time to work through the task.

Discuss the solutions and how this strategy helps with differentiation.

Be sure that the discussion includes the standards that are addressed within the task.



**Does this task follow the essential principles of differentiation mentioned earlier today?  
 If so, how? If not, why not?**

- **To help teachers begin, Tomlinson has developed a list of what she calls “low-prep” and “high-prep” differentiation possibilities.**
- **Tomlinson’s list is reprinted in the back of your guide. Please turn to that page now.**

### **Setting Personal Goals for Differentiating**

**Carol Ann Tomlinson notes that differentiated classrooms don’t magically appear overnight. She contends that it is perfectly acceptable to begin slowly AS LONG AS WE DO BEGIN!**

Show Slide: *Set a goal*

Slide  
*Set a goal*



Notecards

On a 3 x 5 index card, write a personal goal for how you plan to differentiate not in a classroom, set your goal as to how you will assist someone with using differentiation within their classroom.

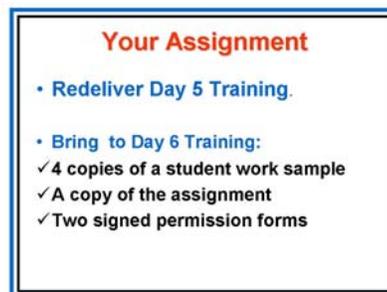
These will be put inside the pocket of your notebook so that you may self-check your progress at our Day 6 training.

*Action Plan*

- Using Tomlinson's chart and the Action Plan form in the back of the Facilitator's Guide, begin working on your individual action plan.

FG page 76

Slide  
*Your Assignment*



- We have just skimmed the surface of differentiation today. Please dive deeper into this topic via the resources provided to each system and RESA by the DOE as well as the other resource listed in your Day 5 materials.

FG page 77

- Day 6 of training will focus on Examining Student Work and Teacher Commentary.
- You will find assignments for Days 6 and 7 listed in the back of your Facilitator's Guide.

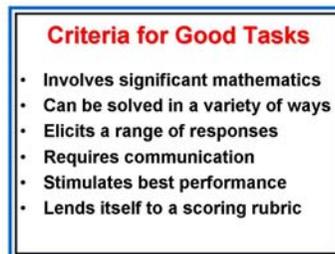
PG page 58  
FG page 78

- For Day 6, please bring a student work sample to training. This sample should include 4 copies of the student work, 1 copy of the assignment that generated the work including the standard(s) being assessed via this student work, and 1 copy of each of the two permission forms (teacher permission form and student/parent permission form). These forms are printed in the back of your guide.

It would be wonderful if the task could be from the sixth or seventh grade framework. However, this is not a requirement. Remember what we said about what constitutes a good task from our Days 3 and 4 Training.

Slide: Criteria for Good Tasks

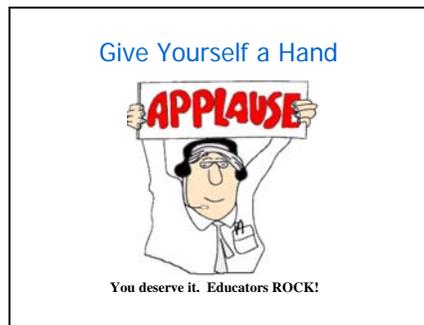
Slide  
*Criteria for Good  
Tasks*



- As you work to implement the GPS standards this first year, we also like for you record your experiences in a notebook, journal, or other calendar format. Note any tasks, strategies, assessments, etc., that worked especially well; critical comments about particular standards (e.g., gaps that need filling, elements that are problematic, terms that need defining, etc.); suggestions for teachers/instructional leaders in Phase II who will be implementing the following year; thoughts or ideas about the second year of your implementation; etc. These will be needed for the on-line Day 7 of training. The State Board of Education will be reviewing the GPS each year, and your comments will provide information for this review, as well as topics for discussion in training. Don't worry, we don't plan to collect your journals . . . just your suggestions!

Slide  
*Give Yourself a Hand*

Show slide: Give Yourself a Hand.



- **Thank you for coming and for all that you do for Georgia's students.**
- **Please remember that the staff at the DOE is available to help. Feel free to contact DOE personnel should you have any questions or comments.**

**BLANK PAGE  
ON  
COLORED  
PAPER!**

## **Glossary**

**Ability Grouping**—Grouping students according to similar readiness levels or learning profiles.

**Alternate Assignment**—Assignments given to particular students or groups of students in lieu of the assignment given to the other members of the class. These assignments are designed to capitalize on student readiness levels, interests, or learning profiles.

**Anchor Activity**—A task or activity that a student automatically moves to upon completion of other assigned work.

**Cluster Grouping**—Flexible grouping and regrouping of students within a classroom to accommodate different instructional needs at different times and/or for different subject or content, different readiness levels, interests, or learning profiles.

**Compacting**—Modifying or streamlining content, process, or product in order to eliminate repetition of previously mastered material.

**Contracting**—Students contract for grades and/or choose from a variety of available project/product options.

**Cooperative Learning**—Students work with other students in groups to achieve a specific goal or purpose. Each group member has a particular, predetermined role in helping the group reach its goal.

**Exit Cards**—Teacher distributes index cards to students a few minutes before the end of class. Students respond quickly to a specific prompt such as “What’s the most important thing you learned today?” Exit cards provide a quick and easy method of assessing understanding.

**Flexible Grouping**—Purposeful reordering of students into a variety of different groups in a short amount of time in order to ensure that all students work with a number of different students on a regular basis. Criteria for grouping—readiness, interest, learning profile, activity or task, content—will vary regularly as well.

**Interest Centers/Groups**—Interest centers ( often used with younger learners) and groups (often used with older learners) allow students choice in an area or areas of study.

**Independent Study Projects**—A student or small group of students pursues an area of interest related to a specific topic, curricular area, or individual area of interest.

**Literature Circles**—Small groups of students read and/or study different books with varying degrees of difficulty and/or focusing on a variety of topics of interest.

**Product/Project Options**—Students chose from a variety of options the way that they will provide evidence of learning. These options allow students to utilize their individual strengths and interests.

**Pyramid Activities**—Any activity that begins with students working individually, progresses through pairs, groups of four, etc., until ending with the whole-class group. A good way to review material or to practice test-taking strategies. Students may begin by individually recording what they know and then add to or change their responses as they collaborate with other students.

**Questioning Strategies**—Different types of questions are employed before, during, and after an activity, a lesson, or a unit of instruction to engage and challenge students to demonstrate their understanding from the knowledge level to the evaluation level. These questions allow students to clarify their thinking, increase their knowledge, and deepen their understanding.

**RAFT Activities**—Students select a Role, Audience, Format, and Topic for a particular task. The task vary but may include writing, oral presentations, skits, review activities, etc.

**Reader's Workshop**—This student-centered, instructional model for “real reading” uses authentic literature and allows students to self-select books. Students read at their own pace, reflect on what they read, and talk about their reading with others.

**Reading Buddies**—One name for peer reading partners, pairs of students who assist each other in reading for comprehension. They may take turns: one reading aloud and the other summarizing OR one reading aloud while the other formulates questions about that reading, etc.

**Scaffolding**—This refers to any support system that enables students to succeed with tasks they find genuinely challenging.

**Subject/Content Acceleration**—A student or group of students moves to a higher level of at an earlier time or age than the other students.

**Thinking Maps**—Visual representations of ideas that allow students to “unpack” their thinking and organize ideas in a visual format rather than solely in sentences or paragraphs.

**Tiered Assignments**—Teachers adjust the degree of difficulty for a particular assignment or task in order to meet the needs of students with varying levels of readiness, varying interests, and/or varying learner profiles.

**Writer's Workshop**—This student-centered, instructional model for “real writing” uses authentic assignments that allow students to participate in differentiated activities while participating in all stages of the writing process. Students spend time on self-selected writing activities.

## **Recommended Readings/Viewings/Websites: Differentiation**

**Note:** A more general list of resources for the standards-based education process is contained in the materials for Day 1 of training.

*At Work in the Differentiated Classroom.* Alexandria, VA: ASCD, 2001.

This excellent resource includes three VHS tapes and a Facilitator's Guide. The videos provide clips of real differentiated classrooms and include commentary by Carol Ann Tomlinson. One set of these materials is being sent to each local system.

Berger, Sandra L. "Differentiating Curriculum for Gifted Students." 1991. Information Center on Disabilities and Gifted Children. Council on Exceptional Children, 1996. <http://ericec.org/digests/e510.html>.

Berger provides an overview of four areas of differentiation: content, process, product, and learning environment. In addition, she lists seven guiding principles for curriculum differentiation developed by the curriculum committee of the Leadership Training Institute.

Hall, Tracey, Nicole Strangman, and Anne Meyer. "Differentiated Instruction and Implications for UDL Implementation: Effective Classroom Practices Report." *Ideas that Work*. National Center on Accessing the General Curriculum. U.S. Office of Special Education Programs. CAST, Inc. 1999-2005. [http://www.cast.org/publications/ncac/ncac\\_diffinstructudl.html](http://www.cast.org/publications/ncac/ncac_diffinstructudl.html).

This report examines information on the theory and research behind differentiated instruction and the intersection with Universal Design for Learning (UDL), a curriculum designed approach to increase flexibility in teaching and decrease the barriers that frequently limit student access to materials and learning in classrooms. The report includes a number of links to sites with more information about differentiated instruction.

"Interact Graphic Organizers." *Write Design Online*. zNet. <http://www.writedesignonline.com/organizers/interact.html#interaction>.

Using varying types/levels of graphic organizers provides one means of differentiating content or process. This website includes a number of different types of graphic organizers along with explanations and suggestions for their use. Links to other resources may also be valuable.

"The I-Search Curriculum Unit." *Literacy Matters*. Education Development Center, Inc., 2003-04. <http://www.literacymatters.org/content/isearch/intro.htm>.

Individual and group investigations, valuable strategies for differentiation, may be organized as I-Searches. An I-Search can actively engage students in the research process as they pursue questions of importance that they care about. This site explains one version of the I-Search process.

Laternau, Joseph. "Standards-Based Instruction for English Language Learners." Honolulu: **Pacific Resources for Education and Learning**.  
[http://www.prel.org/products/pc\\_standards-based.htm](http://www.prel.org/products/pc_standards-based.htm).

This article examines the potential benefits of standards-based instruction for English Language Learners (ELLs), presents a standards-based process for designing standards-based instructional units, and reviews the design of two standards-based units for ELLs. The benefits of performance standards for ELLs are clearly represented in a chart included in the article.

*Teaching Styles Inventory*. Texas Collaborative for Teaching Excellence. CORD, 2005.  
<http://www.texascollaborative.org/tools/TSI.pdf>.

Use this twelve item teaching style inventory to self-assess and self-score your teaching style in the areas of concept representation, learning, interaction, and cognitive processing.

Tomlinson, Carol Ann. *How to Differentiate in Mixed-Ability Classrooms*. 2<sup>nd</sup> ed. Alexandria, ASCD, 2001.

This valuable resource explains both the theory behind and the means to achieve differentiation in mixed-ability classrooms. Each school received one copy of this resource along with other materials in the fall of 2004.

----- "Mapping a Route Toward Differentiated Instruction." *Educational Leadership* 57.1 (Sept. 1999): 12-16. [http://pdonline.ascd.org/pd\\_online/diffinstr/el199909\\_tomlinson.html](http://pdonline.ascd.org/pd_online/diffinstr/el199909_tomlinson.html).

Tomlinson provides a view into three separate classrooms to illustrate what a differentiated classroom does and does not look like.

----- *The Differentiated Classroom: Responding to the Needs of All Learners*. Alexandria, ASCD, 1999.

In this book, Tomlinson discusses the what, how, and why of differentiation, and provides examples from a number of differentiated classrooms.

Tomlinson, Carol Ann, and Caroline Cunningham Eidson. *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades K-5*. Alexandria, VA: ASCD, 2003.

This resource provides a brief primer on differentiation, as well as six differentiated units of instruction for grades K-5: two language arts units, two mathematics units, one science unit, and one social studies unit.

----- *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades 5-9.*  
Alexandria, VA: ASCD, 2003.

This resource provides a brief primer on differentiation, as well as six differentiated units of instruction for grades 5-9: one language arts unit, one mathematics unit, one science unit, two social studies units, and one French unit.

----- *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades 9-12.*  
Alexandria, VA: ASCD, 2005.

This resource is scheduled to be published in August of 2005.

## Mathematics

Danielson, Charlotte. *A Collection of Performance Tasks and Rubrics: Middle School Mathematics.*  
Larchmont, NY: Eye on Education, 1997.

*Illuminations.* <http://illuminations.nctm.org/index.asp>

*Intermath.* <http://www.intermath.uga.gatech.edu>

*National Library of Virtual Manipulatives.* <http://nlvm.usu.edu/en/nav/vlibrary.html>

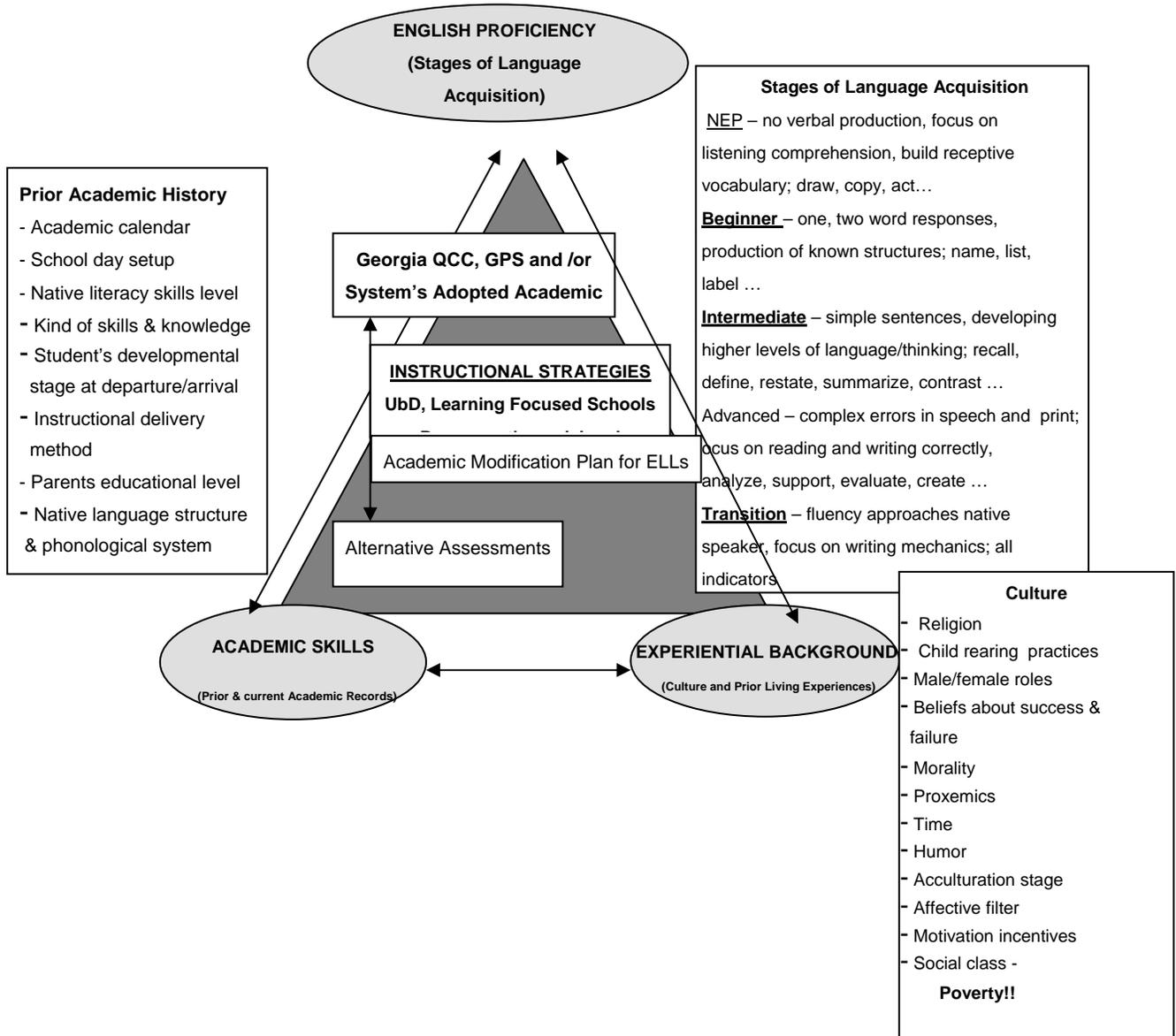
Northey, Sheryn Spencer. *Handbook on Differentiated Instruction for Middle and High Schools.*  
Larchmont, NY: Eye on Education, 2005.

Van de Walle, John A. *Elementary and Middle School Mathematics: Teaching Developmentally, Fifth Edition.* New York, NY: Longman Press, 2004.

Van de Walle, John A. and LouAnn Lovin. *Teaching Student-Centered Mathematics: Grades 5-8.*  
Boston, MA: Pearson Allyn & Bacon, 2006.

**Pre-Assessing the English Language Learner**

**Framework for Understanding the Learning of PHLOTE & ELL Students: Who Am I Teaching?**



© Victoria V. Webbert, 2003

## What Does Differentiated Instruction Look Like?

Differentiated Instruction is...	Differentiated Instruction is not...
1. Assessing students before a unit of instruction to determine what they already know	1. All students in the class completing the same work for a unit/chapter
2. Adjustment of the <b>core</b> curriculum by content (below to above grade level), process (concrete to abstract), and product (simple to complex)	2. Limiting how and what is taught by teaching to the average student
3. Providing assignments tailored for students of different levels of achievement	3. Assigning more work at the same level to high achieving students
4. Having high expectations for <b>ALL</b> students	4. Focusing on student weaknesses and ignoring student strengths
5. Educational experiences which extend, replace, or supplement standard curriculum	5. Activities that <b>all</b> students will be able to do
6. Structuring class assignments so they require high levels of critical thinking and allow for a range of responses	6. Giving the same kind of problems or questions and expecting more
7. Students participating in respectful work	7. Creating more work-extra credit, do when done
8. Students and teachers collaborating in learning	8. Using higher standards when grading
9. Putting students in situations where they don't know the answer- often	9. Providing free-time challenge activities
10. Differing the pace of instruction	10. Using capable students as tutors
11. A blend of whole class, group, and independent learning	11. Using individualized instruction

## Instructional Accommodations for ELLs

**Accommodations for ELLS are appropriate and effective only to the level that these match the English language learners proficiency in English, prior academic knowledge and cultural learning patterns.**

<p>give tests orally rather than in written form          give more time to complete assignments          allow same-language buddy to assist          require fewer responses to demonstrate mastery          permit incomplete sentences in responses          permit ungrammatically correct sentences in responses          provide lower level text on content material          provide video on content material          provide text on tape          highlight key points          reduce number of key points that student is responsible for knowing          give advanced organizers/study guides          permit open book tests          use graphic organizers          give written instructions as well as oral          make a written record of instruction and display it on chart paper          take time to develop students' prior knowledge of new topics          increase % of student talk about topic (more discussions)          break students into small groups for discussion          plan for group work          use demonstrations when possible          present model of work done well at the beginning of the assignment          use hands-on activities when possible          give sufficient wait time after asking questions          adapt homework requirements to reflect stage of language development</p>	<p>use performance based assessment when possible          adapt project/assignment requirements so students can participate          provide learning centers (language masters, books on tape, magazines for classifying and developing picture dictionaries, language based games)          provide additional examples          pair verbal directions with visual clues          provide computer time (phonics software, <i>Kidspiration</i> graphic organizer software, internet)          seat student near teacher or positive role models          relate content to real life          present tasks from easy to hard          reduce details needed to learn main concepts          use simpler vocabulary or paraphrase          look at students when talking          use audio-visual aids frequently          provide student with outline of lesson notes          use peer assisted note taking          use role-playing          use games          provide self-checking materials          use different colors for worksheets          use enlarged type on worksheets          reduce the length or amount of work          mark only correct answers          do NOT write the name of a Korean student in red...it means death          give short quizzes/avoid long tests          allow the use of a dictionary during tests          allow student to take tests until passes/emphasize mastery</p>
--	---

## Georgia Department of Education, GPS Differentiation Menu

### For students who have difficulty with writing/composing written material:

- cooperative learning groups
- word processing application
- dictation to a scribe or onto a tape
- demonstrate/role play
- oral responses, presentation, and assessments
- multi-media presentation
- graphic organizer
- extended time on timed tasks
- word prediction software
- *Co-Writer*, *Write Out Loud*, *Dragon Naturally Speaking*, or other software
- voice output computer programs
- spell check/grammar check (not allowed on standardized tests)
- task item rubrics
- teacher prepared format
- break work into manageable parts
- individual or small group test taking
- story starters
- sentence starters
- outlines
- tape recorded essays and oral presentations
- voice activated software
- portable word processor
- prewriting conference/prewriting activities
- illustrations
- K-W-L chart
- provide sample work
- debates
- proofreading checklist
- word bank/word wall
- matrix usage
- note taking assistance
- provide student with key words on essay tests
- abbreviate assignments
- adapted writing tools or other assistive technology, as appropriate

### For students who have difficulty with reading/accessing written material:

- cooperative learning groups/group discussion
- extended time on timed tasks
- voice output computer programs
- talking dictionaries
- break work into manageable parts/presentation of small chunks of a passage
- individual or small group test taking
- testing with reader or scanable text readers
- books on tape/listening to recording/viewing film version of story
- text read to the student by adult or peer
- reading guides (highlighted text, summaries, etc.)
- Language Master
- tracking light or other tracking device
- colored overlays
- computer generated books
- answer "yes/no" questions for comprehension checks
- choral reading
- pre-reading summary

- electronic text (text reader)
- oral (or audio) presentation to student
- teacher introduction of vocabulary words
- paired reading
- picture cues
- illustrations to show comprehension
- *CoWriter*, *Write Out Loud*, other software
- K-W-L chart
- previewing topics to introduce vocabulary and key concepts
- listening guide to facilitate note taking
- links to prior knowledge/personal experience
- debates
- word bank/word wall
- other assistive technology, as appropriate

**For students who have difficulty speaking:**

- sign language interpreter/transliterater
- augmentative communication devices
- communication boards
- cooperative learning groups
- usage of other preferred means of communication
- demonstrate/play act tasks
- picture symbol program
- object symbols
- voice output computer programs
- object symbols
- voice output computer programs
- break work into manageable parts
- provide time to respond
- ask “yes/no” questions
- indicating correct answer by pointing
- assign written rather than oral reports
- avoid situations that create pressure
- other assistive technology, as appropriate

**For students who have difficulty listening:**

- cooperative learning groups
- visual presentation using computer software, such as *PowerPoint* or *Inspiration*
- break work into manageable parts
- repeat, rephrase, simplify statements and instructions
- provide time to respond
- use of literal, concrete speech
- visual aids
- preferential seating
- note taking assistance (copy or notes/note-taking guides/note taker)
- have student repeat instructions
- reinforce oral instructions with written instructions
- assistive technology, as appropriate

**For students who have difficulty with mobility:**

- cooperative learning groups
- switch use
- touch screen
- modified keyboards
- extended time on timed tasks (or waive timed tasks)
- modified handwriting and/or grid paper
- weighted pencils and other motoric devices
- slant board or wedge

- magnets, tape, or other paper stabilizers
- stabilized materials
- break work into manageable parts
- individual or small group test taking
- provide time to respond
- page turner
- flexible schedule/scheduled rest breaks
- provide assistance in manipulating classroom and personal materials
- note taking assistance
- adaptive or special furniture
- dictation to a scribe or onto a tape
- other assistive technology, as appropriate

**For students who have difficulty attending to task:**

- cooperative learning groups with specific tasks assigned
- rubrics
- graphic organizers
- extended time on timed tasks
- break work into manageable parts
- individual or small group test taking
- task analysis
- task analysis graphically displayed
- proximity control
- visual, verbal, and tactile cues
- gain student's attention before delivery of information
- flexible schedule/scheduled rest breaks
- preferential seating
- note taking assistance
- provide study guides for tests
- have student repeat instructions
- regular notebook/agenda checks
- give abbreviated assignments
- set time allotments for tasks
- organizer/daily planner/homework notebook/folders
- fewer items on each page
- allow students to mark answers in workbooks and test booklets
- select optimal time of day for assessments
- provide study carrel or other quiet work space with minimal distractions
- assistive technology, as appropriate

**For students who have difficulty with organizations/study skills:**

- cooperative learning groups
- graphic organizers
- extended time on timed tasks
- break work into manageable parts
- individual or small group test taking
- task analysis
- task analysis graphically displayed
- organizer/daily planner/homework notebook/folders
- provide time to respond
- preferential seating
- provide sample work
- task item rubrics
- provide study guides for tests
- have student repeat instructions
- regular notebook/agenda checks
- set time allotments for task
- fewer items on each page
- provide study carrel or other quiet work space with minimal distractions

- provide books to remain at home
- establish and post daily routines
- allow students to mark answers in workbooks and test booklets
- assistive technology, as appropriate

**For students who are Deaf/Hard of Hearing:**

- sign language interpreter/transliterator
- amplification equipment
- sound-treated classrooms/special acoustics
- visual presentation using computer software, such as *PowerPoint* or *Inspiration*
- highlighted vocabulary
- closed captioning for viewing movies and other video presentations
- cooperative learning groups
- demonstrate/play act tasks
- voice output computer programs
- individual or small group test taking
- give short, specific verbal instructions
- story webs
- story starters
- *Write Out Loud*, *CoWriter*, or other software
- peer scribe
- note taking assistance
- provision of class notes with critical information, test questions, and highlighted vocabulary
- preferential seating
- refrain from speaking with back turned to students
- provide a work space with minimal noise
- other communication aids (assistive technology), as appropriate

**For students who are Visually Impaired:**

- Braille text/Braille writer
- enlarged print
- print with optical devices
- tactile symbols
- calendar system
- auditory and electronic formats
- dark or raised line paper
- cooperative learning groups
- slant board
- individual or small group test taking
- low vision devices/magnifying equipment
- screen readers/text scanners
- audiotaped directions and text (Talking Books for the Blind)
- word processing program with voice output
- electronic Braille note takers
- positioning in class away from glare
- black print handouts
- primary typewriter
- preferential seating
- usage of grid paper
- special or adapted lighting
- other alternate formats, communication aids, or assistive technology, as appropriate

## Student-Created Products

<p><b>Verbal</b></p> <p>anecdote audio recording ballad book report campaign speech characterization choral reading cinquain comedy act comparison conference couplet debate description dialog discussion documentary dramatization explanation fairy tale/tall tale free verse interview jingle joke lecture lesson limerick mock interview monologue myth newscast nursery rhyme oral report panel discussion quatrain radio show radio commercial rap recorded dialogue rhyme weaving wire sculpture</p>	<p>riddle role-play song speech story telling survey</p> <p><b>Visual</b></p> <p>advertisement CD cover anagram animation annotated biblio. area graph artifact collection award banner bar graph blueprint book jacket booklet bookmark brochure bulletin board calendar cardboard relief cartoon chart checklist collage collection comic book costume cross-section crossword puzzle design diagram diorama display drawing film dialog dictionary</p>	<p>filmstrip flag flashcard flip chart flowchart game graphic greeting card hieroglyphic icon id chart illustration layout map mask mobile mosaic movie newscast outline painting pattern pennant photo essay photograph picture dictionary picture story pie chart playing card print puzzle scatter graph scenario scrap book scroll sign silk screen slide show stencil TV commercial timeline letter to editor limerick</p>	<p>transparency travel ad travel log tree chart video tape wall hanging weather map weaving web web page window shade word game word search</p> <p><b>Kinesthetic</b></p> <p>apparatus aquarium artifacts card game cardboard relief ceramics charade circuit boards clothing collage collection dance demonstration discovery center display dramatization equipment etching experiment fair food furniture gadget game hat imaginary play patent pen pal</p>	<p>improvisation instrument invention jigsaw puzzle kite laboratory learning center macramé mime mobile model origami parallel play paper mache play prototype puppet finger puppet marionette hand puppet puppet show puzzle quilt relief rubbing role play sand casting scavenger hunt service sewing cards shadow box simulation skit soap sculpture stage set stitchery terrarium tie-dye tool toy uniform vehicle riddle satire</p>
--	---	---	--	--

<b>Written</b>	editorial essay fairy tale/tall tale field manual free verse friendly letter glossary guidebook handbook handout interview script job description joke book jot list journal article label law lesson plan	list log lyrics magazine magazine article manual metaphor myth new story ending newsletter newspaper newspaper article notes novel oath outline pamphlet parody	petition plan play poem prediction profile puppet show questionnaire questions radio script rating scale rationale recipe reference report research paper review rewritten ending	science fiction scroll short story skit slogan speech story story problems survey telegram TV script term paper test travel log vocabulary list yearbook
----------------	---	--	--	---

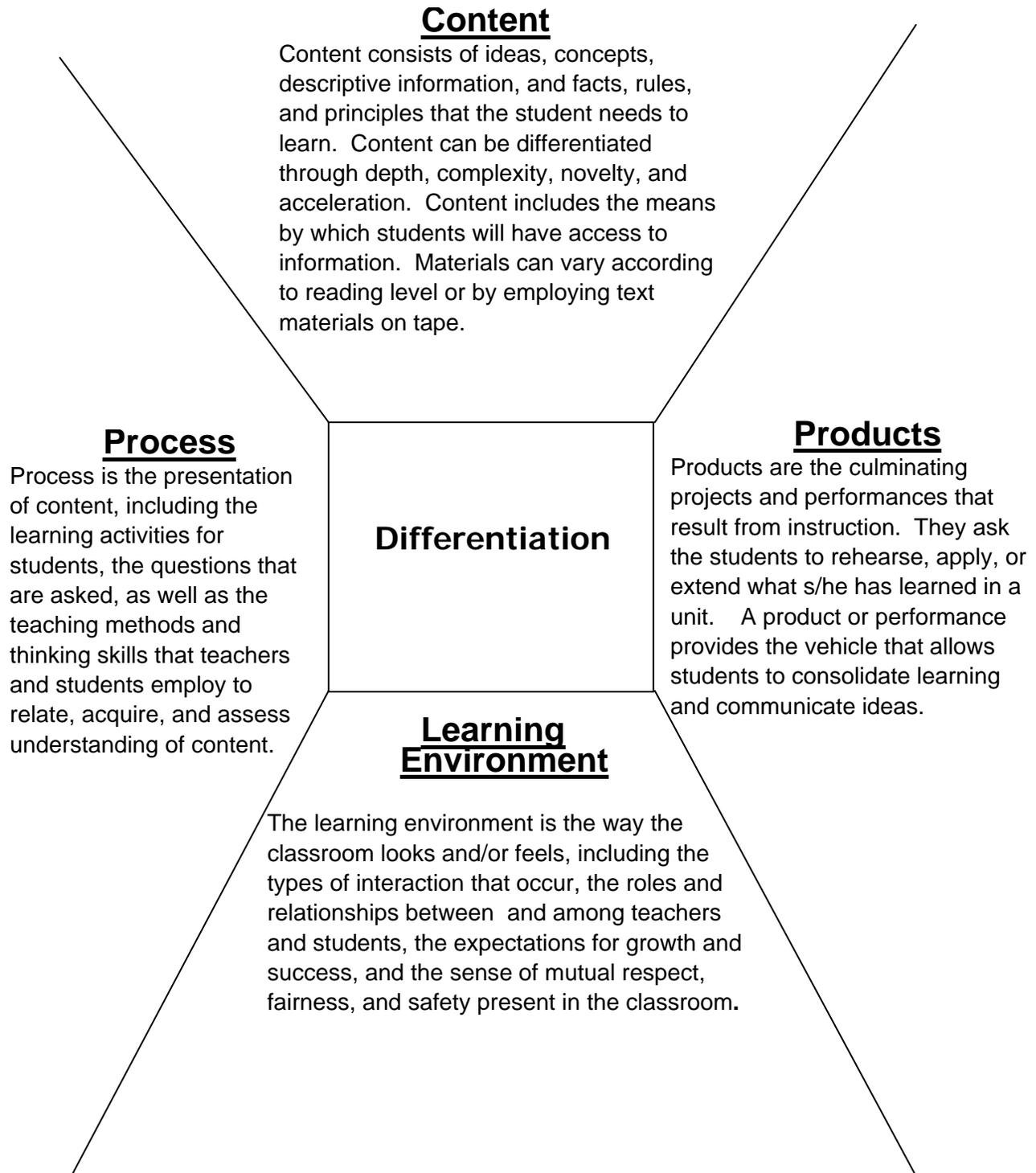
from GA Dept. of Education *Curriculum Guide for the Education of Gifted Students*, by Jim Curry and John Samara

## Product Possibilities

Design a web page	Design political cartoons	Compile a newspaper
Develop a solution to a community problem	Formulate & defend a theory	Develop an exhibit
Create a public service announcement	Conduct a training session	Conduct an ethnography
Write a book	Design & teach a class	Write a biography
Design a game	Do a demonstration	Present a photo-essay
Generate & circulate a petition	Present a news report	Hold a press conference
Write a series of letters	Write a new law & plan for its passage	Develop & use a questionnaire
Present a mime	Make learning centers	Conduct a debate
Design & create a needlework	Create authentic recipes	Make a video documentary
Lead a symposium	Choreograph dances	Create a series of illustrations
Build a planetarium	Present a mock trial	Write poems
Conduct a series of interviews	Make a plan	Develop tools
Develop a collection	Compile & annotate a set of Internet resources	Design or create musical instruments
Submit writings to a journal, magazine, or newspaper	Design a new product	Compile a booklet or brochure
Interpret through multimedia	Write a series of songs	Draw a set of blueprints
Design a structure	Create a subject dictionary	Present a radio program
Design & conduct an experiment	Make and carry out a plan	Do a puppet show
Collect & analyze samples	Design a simulation	Create a series of wall hangings
Plan a journey or an odyssey	Write a musical	Go on an archeological dig
Make an etching or a woodcut	Develop a museum exhibit	Design & make costumes
Write letters to the editor	Be a mentor	Present an interior monologue
	Write or produce a play	Generate charts or diagrams to explain ideas

Carol Ann Tomlinson, *How to Differentiate in a Mixed-Ability Classroom*, 2<sup>nd</sup> ed., Alexandria, ASCD, 2001, 89.

## **What to Differentiate**



## ***Strategies for Managing a Differentiated Classroom***

Carol Ann Tomlinson

1. Have a strong rationale for differentiation instruction based on student readiness, interest, and learning profile.
2. Begin differentiating at a pace that is comfortable for you.
3. Time differentiated activities to support student success.
4. Use an “anchor activity” to free you up to focus your attention on your students.
5. Create and deliver instructions carefully
6. Assign students into groups or seating areas smoothly.
7. Have a “home base” for students.
8. Be sure students have a plan for getting help when you're busy with another student or group.
9. Minimize noise.
10. Make a plan for students to turn in work.
11. Teach students to rearrange furniture.
12. Minimize “stray movement”.
13. Promote on-task behavior.
14. Have a plan for “quick finishers”.
15. Make a plan for “calling a halt”.
16. Give your students as much responsibility for their learning as possible.
17. Engage your students in talking about classroom procedures and group process.

### Student Scenarios for "Differentiation Stratego: A Reality Game" Cards

<p>Roy is a very bright student. He can remember most factual information the first time it is presented. However, he has a problem remaining focused during traditional instructional activities (lectures, worksheets, etc.) When he stops working he will sometimes look around the class, and beat on his desk. He simply cannot sit still, and pesters other students continually.</p>	<p>Ahmad is a gifted student. He is very interested in science. Ahmad often seeks out information pertaining to science outside the normal course curriculum. He excels on his daily class work, but will become bored if he is required to complete whole class assignments.</p>
<p>Sheila is an extremely quiet, intelligent young lady. She doesn't participate in class discussions, but consistently performs well on standardized tests. Sheila turns in all of her homework and class work assignments. She receives A's in all of her courses, but she dislikes completing more difficult or challenging assignments.</p>	<p>Phillip loves to draw. He has a book of cartoon characters that he uses his sketch paper to reproduce. Phillip often puts off classroom assignments to continue drawing the characters in his book. His classmates have acknowledged his talent, and often comment on his superior ability.</p>
<p>Sheila is an extremely quiet, intelligent young lady. She doesn't participate in class discussions, but consistently performs well on standardized tests. Sheila turns in all of her homework and class work assignments. She receives A's in all of her courses, but she dislikes completing more difficult or challenging assignments.</p>	<p>Phillip loves to draw. He has a book of cartoon characters that he uses his sketch paper to reproduce. Phillip often puts off classroom assignments to continue drawing the characters in his book. His classmates have acknowledged his talent, and often comment on his superior ability.</p>
<p>Roscoe is a very smart student. However, he likes to entertain the class with his jokes and spontaneous comments during class sessions. He makes "funny" comments that actually go far beyond humor. The cutting effect of such comments is intentional. His classmates often become distracted by his "off the wall" statements. Though Roscoe enjoys amusing the class, he completes his assignments on time. He receives A's and B's in all of his classes.</p>	<p>Demarcus has a lot of energy. He can't sit still for more than 10 to 15 minutes at a time. He appears to be fidgety and has a very short attention span. He consistently gets out of his seat without permission and walks around the classroom. He attempts to move around the room when he should be working. If Demarcus is not out of his seat, he is raising his hand to ask permission to leave the room. His most common requests include: a) "Can I go to the restroom?" b) "I left my book in my locker. Can I go get it?" or c) "Can I go see the counselor?"</p>

<p>Stephen participates in various sports. He is a member of the basketball, football, and track teams. However, he is not consistent in turning in daily class work assignments. Stephen rarely completes homework assignments, and is a mediocre student. Stephen reads sports magazines incessantly. He is not a discipline problem, but does not seem to show an interest in anything besides sports.</p>	<p>Paul is an inclusion student. He feels a little uncomfortable being in a large class after years in a smaller setting. Paul thinks that many of the kids in his class are smarter than he is. As a result, he tends to withdraw during class discussions. He exhibits little or no effort on class assignments or projects. Paul can understand basic concepts and shows potential when he tries to complete the work he is given.</p>
<p>Carla likes to write poetry and listen to music. She often looks up her favorite artist's lyrics on the internet and attempts to memorize them. During class sessions it is not unusual for Carla to hum or sing to herself. Recently, her CD player was collected in class while she was listening to her favorite singing group. Carla aspires to become a famous singer and go on tour all over the world.</p>	<p>Kim is an extremely bossy student. She is very opinionated, and does not hesitate to interrupt lectures or class activities to challenge the validity of a concept presented. She does not work well in groups because she attempts to perform all the tasks herself without the assistance of other group members. Her classmates despise her and avoid working with her whenever possible.</p>
<p>Lucy is very talkative. She can't wait for a break in the class session so she can exchange the latest gossip with one of her friends. She is a very poor listener and often does not realize she is talking. The teacher often has to tell her to stop talking at inappropriate times. Lucy is a very bright student, but allows her talking to interfere with completing individual assignments.</p>	<p>Stephanie has trouble with her reading. Her standardized test scores reflect that she reads several years below grade level. When Stephanie reads aloud, some of the students laugh at her. Stephanie has trouble pronouncing basic words, and she possesses low reading comprehension skills. She feels uncomfortable reading aloud in class because of the comments other children make toward her.</p>
<p>Raphael always challenges the teacher's fairness regarding major tests. He seeks out alternative measures to prove his ability. Raphael may suggest to the teacher to take a different type of test or to be tested after the class is tested. He often argues over the correctness of answers on the test. The teacher feels he may be trying to escape blame for his failures, and uses his behavior to gain attention from his peers.</p>	<p>Mary is a constant worrier. She worries so often it may lead to her becoming upset physically and mentally. She worries about tests, projects, and how people perceive her. Mary expects failure, and this expectation often deepens her worrying. Her feelings tend to lead to lack of participation and withdrawal during class activities.</p>

<p>Laurie questions everything. She asks an abnormal number of questions about every conceivable subject. Laurie tends to ask questions even when she knows the answer. She even interrupts lectures or class activities to ask questions. Laurie makes very good grades, and her favorite subject is math. She would love to become a math teacher someday.</p>	<p>Jordan is extremely quiet and does not participate in class sessions. He sits in class and does nothing most of time. Jordan does enjoy playing various games on the computer, and he seems to make attempts to participate in class sessions that involve review games (i.e., Jeopardy, Wheel of Fortune).</p>
<p>Lakeisha approaches every task with an "I can't" attitude. Her teacher thinks Lakeisha lacks self-confidence. She even claims to be unable to complete assignments that she has done before. Lakeisha feels it's much better to say, "I can't" than to attempt any task. She will attempt to do rudimentary assignments, but refuses to do anything that requires her to complete complex tasks.</p>	<p>Ralph is an average student. He receives B's and C's in his core classes. He infrequently completes his homework and class work. Ralph's dad taught him how to work on cars. Ralph knows how to change oil, check tire pressure, and make other minor car repairs. He enjoys taking things apart and putting them back together. Ralph also enjoys working on electronic devices such as gameboys, radios, and even computers.</p>
<p>Joy seems to be satisfied with second place. She intentionally identifies the classmate who is first or the most intelligent pupil. She feels that she is only worthy of second place. Joy is capable of being a top student, but she seems to have a sense of inferiority. She tends to idolize the first-place student, and her lack of self-confidence makes her feel she could never be first.</p>	<p>Chan is overwhelmed with the number of assignments he has yet to complete. He gets so far behind he can't seem to catch up. Every class day seems to dig him deeper and deeper into the hole of failure. Chan gets very frustrated when he is unable to finish his class work or assigned projects. He tries to do his best, but he can never seem to catch up.</p>
<p>Simone is an inclusion student. She demonstrates a high degree of ability on the individual assignments she turns in. However, she always wants to do what the group is doing. She has a tendency to see herself as always "part of the group." Simone can complete assignments on her own, but seeks attention from her classmates to validate herself.</p>	<p>Andrew does not complete his assignments because he says, "I've never seen this before" or "I don't know anything about that". He repeatedly makes comments like, "What?" "How did you do that?" "Huh?" and "Could you do that again?" The teacher questions whether Andrew really doesn't understand or if he is "playing dumb." He may be using this as a means to excuse himself from performing in the classroom.</p>

<p>Heather makes strange sounds or noises in the classroom. Some of her common odd noises include: hums, whistles, throat noises, and tapping on her desk. Heather plays the violin in the orchestra, and loves listening to classical music. Sometimes the noise she makes prevents her from completing her assignments and may distract other students.</p>	<p>Samuel never finishes a project. He loves to plan large scale projects, but he never comes close to completion. When Samuel works in a group situation, he will praise those that go along with his elaborate ideas and ridicule the more conservative group members. His goals are often too high for successful achievement, and he leaves the majority of the work for his group members to complete.</p>
<p>Robert is a student that has been retained several times during his schooling. Many of his past teachers pass him reluctantly because they don't want to deal with his disrespectful behavior another year. Robert has the ability to perform on a satisfactory level in a school setting, but has yet to reach his full potential. He doesn't work up to his ability level, and has taken on an indifferent attitude toward school because of past failures. Robert feels uncomfortable at times because he is older than the other students, and this makes him feel a little insecure.</p>	<p>Brittney complains about every assignment she is given. Her teacher usually writes the assignment on the board or tells the class when a project is due with very little input from the students. Brittney completes the majority of her work, but dislikes the redundant tasks she completes in class. In Brittney's spare time she writes and performs in plays for her local community center. She recruits younger kids from the neighborhood to participate in her productions. Brittney often wishes her classes at school were just as exciting as the performances at the community center.</p>
<p>Ethan displays an "I don't care" attitude toward school. He repeatedly says "he doesn't care" to teachers, students, and other school personnel. He shows disgust and lack of interest in many of his class activities.</p>	<p>Suzico is an above average student, and a perfectionist. She takes more time to complete assignments than other students in the class because she wants to make sure her answers are correct and her penmanship is neat.</p>
<p>Matthew likes to be the first person finished with his assignments. He is an intelligent young man, but he rushes through his work so he can be the first person complete. Occasionally, the speed at which he completes his assignments results in incorrect answers.</p>	<p>Maria is a good student. However, English is not her first language. Sometimes she struggles with comprehending the content of her textbooks because she is primarily a Spanish speaking student.</p>
<p>Chris is every teacher's favorite student. He consistently works to the best of his ability on every assignment. If he finishes early, he gladly assists the teacher or helps other students complete their work.</p>	<p>Margaret has to work harder to understand ideas and concepts; but once she does, she never forgets. She is always willing to spend extra time on assignments.</p>

**BLANK PAGE  
ON  
COLORED  
PAPER!**



## Jumping Jacks (From Unit 2 of the Grade 7 Framework.)

Adapted from *Variables and Patterns* © 2004 *Connected Mathematics Project*.  
Investigation 1.

### Preparing for a Bicycle Tour

The popularity of bicycle tours gave five college students—Sidney, Celia, Liz, Malcolm, and Theo—an idea for a summer business. They would operate bicycle tours for school and family groups. They chose a route from Atlantic City, New Jersey, to Norfolk, Virginia, including a long stretch along the ocean beaches of New Jersey, Delaware, and Maryland. They decided to name their business Ocean Bike Tours. While planning their bike tour, the five friends had to determine how far the touring group would be able to ride each day. To figure this out, they took test rides around their home-towns.

### Think About This!

- How far do you think you could ride in a day?
- How do you think the speed of your ride would **change** during the course of the day?
- What conditions would affect the speed and distance you could ride?

To answer the questions above, you would need to take a test ride yourself. Although you cannot ride your bike around the classroom, you can perform a simple experiment involving jumping jacks. This experiment should give you some idea of the patterns commonly seen in tests of endurance.

### Jumping Jack Experiment

This experiment requires four people:

- a jumper (to do jumping jacks)
- a timer (to keep track of the time)
- a counter (to count jumping jacks)
- a recorder (to write down the number of jumping jacks)

As a group, decide who will do each task.

Here's how to do the experiment: When the timer says "go," the jumper begins doing jumping jacks. The counter counts the jumping jacks out loud. Every 10 seconds, the timer says "time" and the recorder records the total number of jumping jacks the jumper has done so far. Repeat the experiment four times so that everyone has a turn at each of the four tasks.

**A.** Prepare a **table** for recording the total number of jumping jacks after every 10 seconds, up to a total time of 2 minutes (120 seconds).

Time (in seconds)	0	10	20	30	40	50	60	...
Total number of jumping jacks								

**B.** Do the jumping jack experiment and record your group's data. (BE sure to include the data for all four people in your group.)

*Use your table of jumping jack data to answer these questions:*

**C.** How did your jumping jack rate (the number of jumping jacks per second) change as time passed? How is this shown in your table?

**D.** What might this pattern suggest about how bike-riding speed would change over a day's time on the bicycle tour?

### **Making Graphs**

**E.** Make a graph of your jumping jack data.

**F.** What does your graph show about jumping jack rate as time passes? (Another way to say this is, What does your graph show about the relationship between the number of jumping jacks and time?)

**G.** Is the relationship you found between the number of jumping jacks and time easier to see in the table or the graph? Explain your answer.

**Some additional questions that the teacher may want to ask are listed below.**

- 1. What are the variables in this situation?*
- 2. Which should probably be thought of as the independent variable and which as the dependent variable?*
- 3. Which axes should be used to show the progression of values for each variable?*
- 4. What values should be represented by the grid marks (commonly called tic-marks) on the two axes? Why would other scales be problematic?*

*How do we make points on the graph represent values of the time and distance variables?*





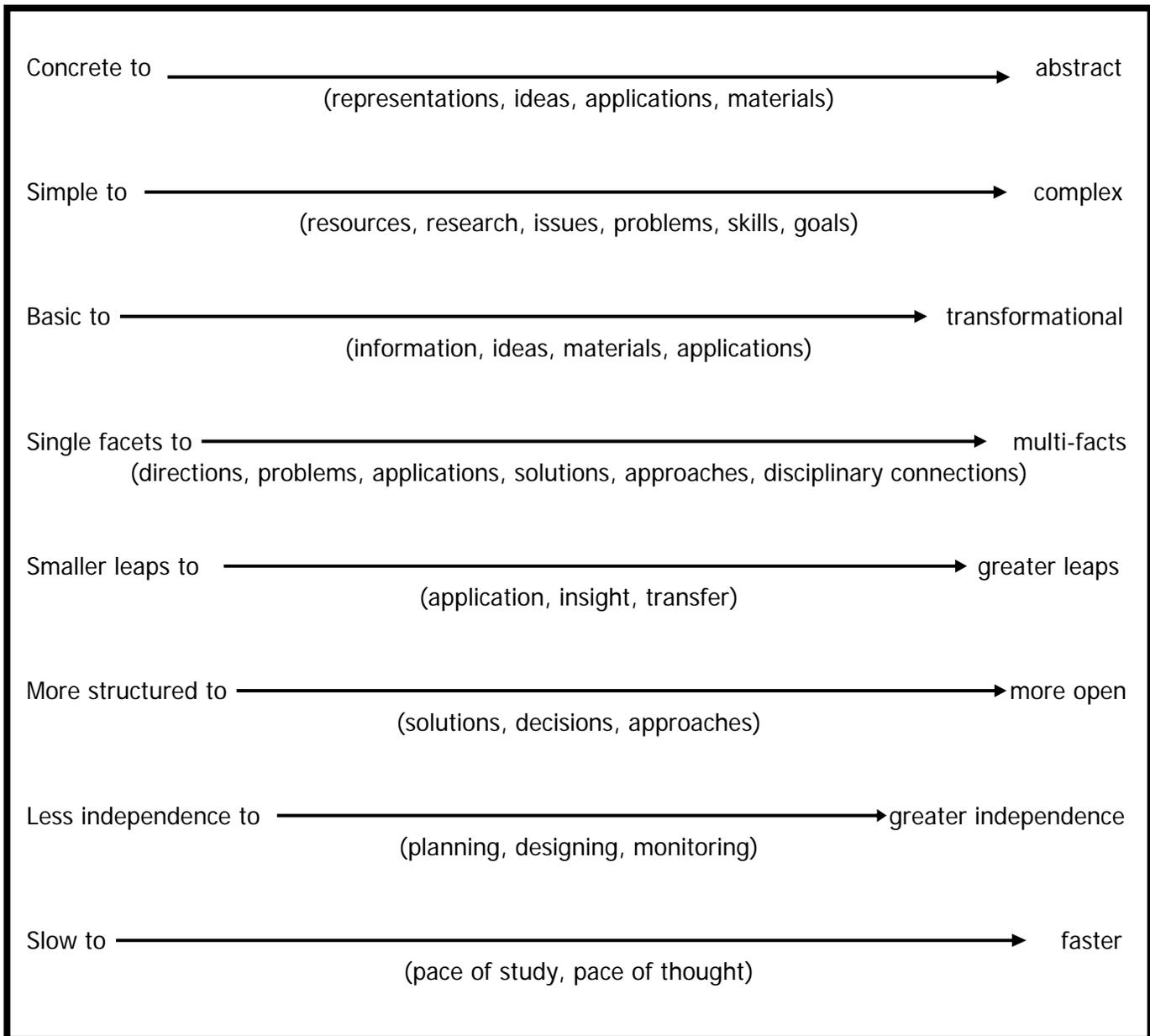
## **Some Underlying Assumptions of Differentiated Instruction**

Read each assumption and assess your own “way of thinking about teaching” by marking the star if this assumption is implicit when planning instruction, the smiley face if you take this assumption into consideration in some way during planning and the question mark if you need to think about your practice in terms of this assumption.

<b>The Underlying Assumption</b>	☆	😊	?
1. When planning, I accommodate multiple and varied learning needs (social as well as cognitive), rather than attempting to accommodate them after student frustration or failure.			
2. I work to create and maintain a classroom community where students feel safe and valued as they are; at the same time I support each student in order to maximize his or her potential.			
3. I interact with each student with positive regard and positive expectations.			
4. I recognize every student has both talents and areas of need, and I emphasize the student's strengths rather than accentuating labels, deficits, or differences. At the same time, I do not call attention to the differentiation, but rather I help students appreciate varied ways in which all of them can find personal success with important goals.			
5. I use multiple and alternative forms of assessment at all stages of student learning in order to uncover and address a full range of learning needs and strengths.			
6. I gather and employ knowledge and information about my students in order to identify and address their varied readiness levels, interests, and learning profiles.			
7. I find ways to provide opportunities for all students to access meaningful and powerful ideas, information, and skills rather than reducing the standards, watering down the curriculum, or assigning busy work.			
8. I use multiple methods to engage students in active learning. Although I may employ whole-class instruction, I question and encourage student discussions and explanations to enrich and remediate throughout the instruction.			
9. I work to develop classroom management skills that allow 1) multiple tasks to proceed smoothly in the classroom, 2) students to take increasing responsibility for their learning, and 3) the time to monitor student activity and coach for student growth and quality work.			

Based on the work of Stephanie Corrigan, Utah Valley State College. Adapted and modified from “The Facilitator’s Guide,” *At Work in the Differentiated Classroom*, Alexandria: ASCD, 2001, 57-58.

## *The Equalizer*



***Tomlinson***

# MATH "COORDINATED"

## Coordinating Translations (From Unit 4 of the Grade 7 Framework.)

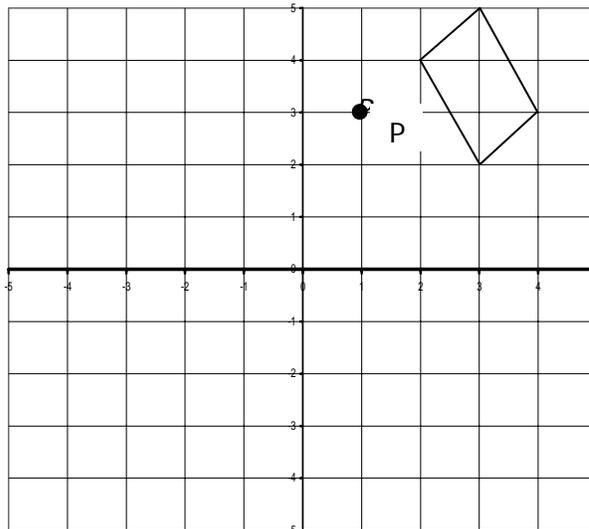
Your task is to plot any creative polygon you want on the coordinate plane, and then create polygons congruent to the one you designed using the three translations described below.

1. For each vertex of your original polygon in the form  $(x, y)$ , create its image at the coordinates  $(x+4, y)$ .
2. For each vertex of your original polygon in the form  $(x, y)$ , create its image at the coordinates  $(x, y - 3)$ .
3. For each vertex of your original polygon in the form  $(x, y)$ , create its image at the coordinates  $(x - 4, y+1)$ .

The vertices of your original polygon combined with their images must be mapped to points in all four quadrants of the coordinate plane to receive full credit.

\*\*\*\*\*

## Coordinating Rotations (From Unit 4 of the Grade 7 Framework.)



1. Label the coordinates of the polygon above.
2. Rotate the polygon  $90^\circ$  (counterclockwise) about the origin and label the coordinates.
3. Rotate the polygon  $90^\circ$  (clockwise) about the origin and label the coordinates.
4. Describe a rotation that would guarantee the point  $P(1,3)$  would be inside the square formed by the vertices  $(5,5)$ ,  $(-5,5)$ ,  $(-5,-5)$ , and  $(5,-5)$ .

## Dilations in the Coordinate Plane (From Unit 5 of the Grade 7 Framework.)

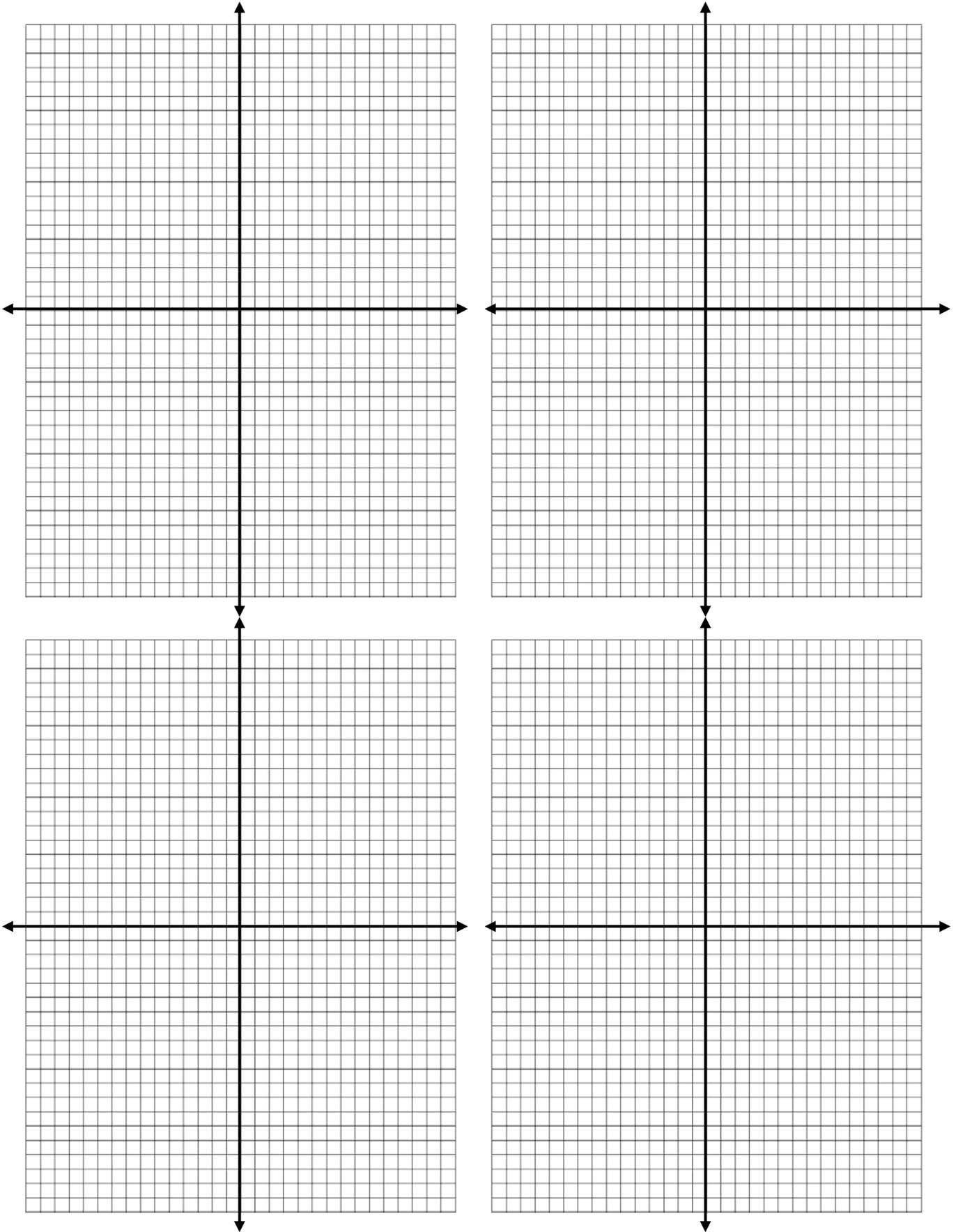
Plot the ordered pairs given in the table to make six different figures. Draw each figure on a separate sheet of graph paper. Connect the points with line segments as follows:

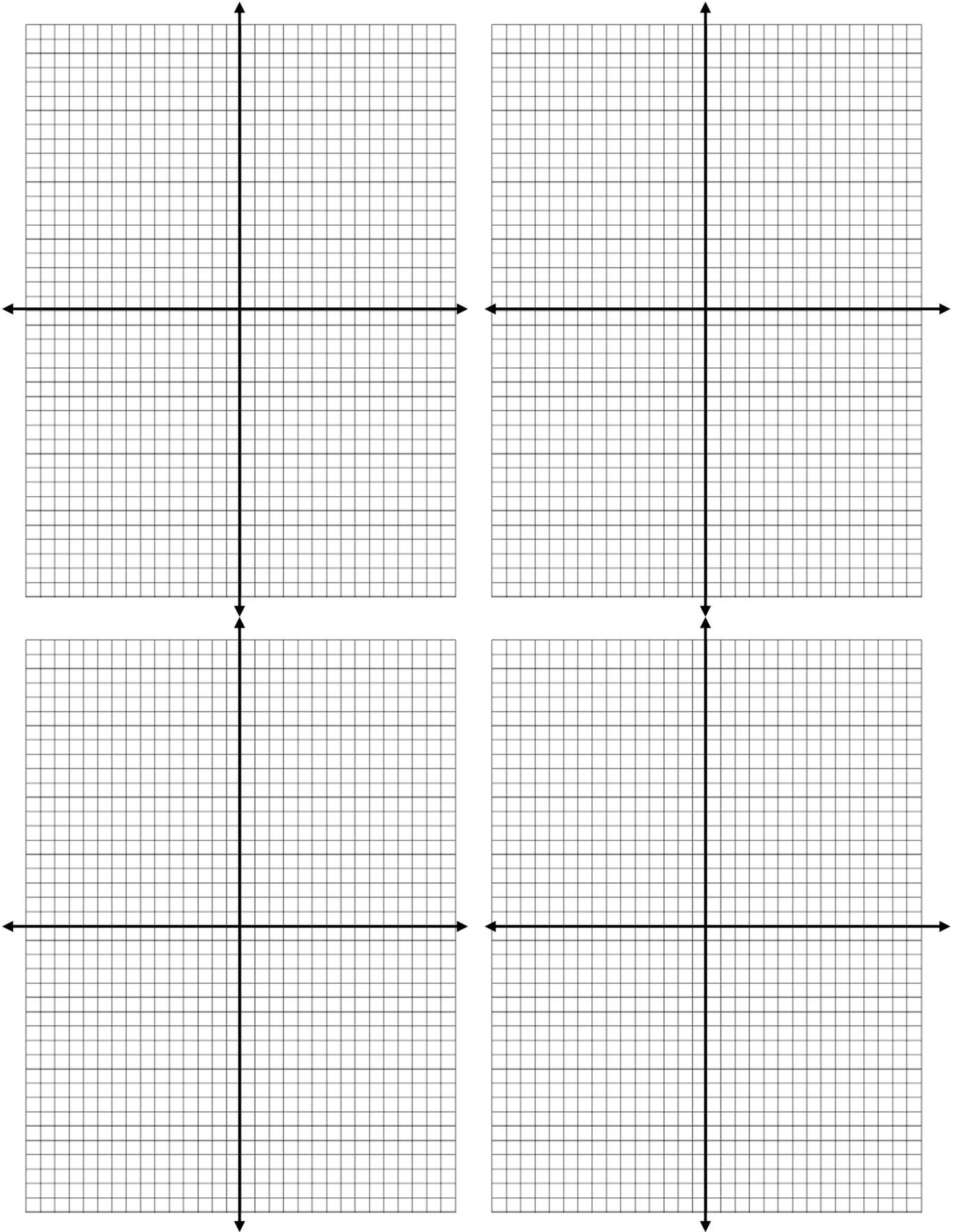
- For Set 1, connect the points in order. Connect the last point in the set to the first point in the set.
- For Set 2, connect the points in order. Connect the last point in the set to the first point in the set.
- For Set 3, connect the points in order. Do not connect the last point in the set to the first point in the set.
- For Set 4, make a dot at each point (don't connect the dots).

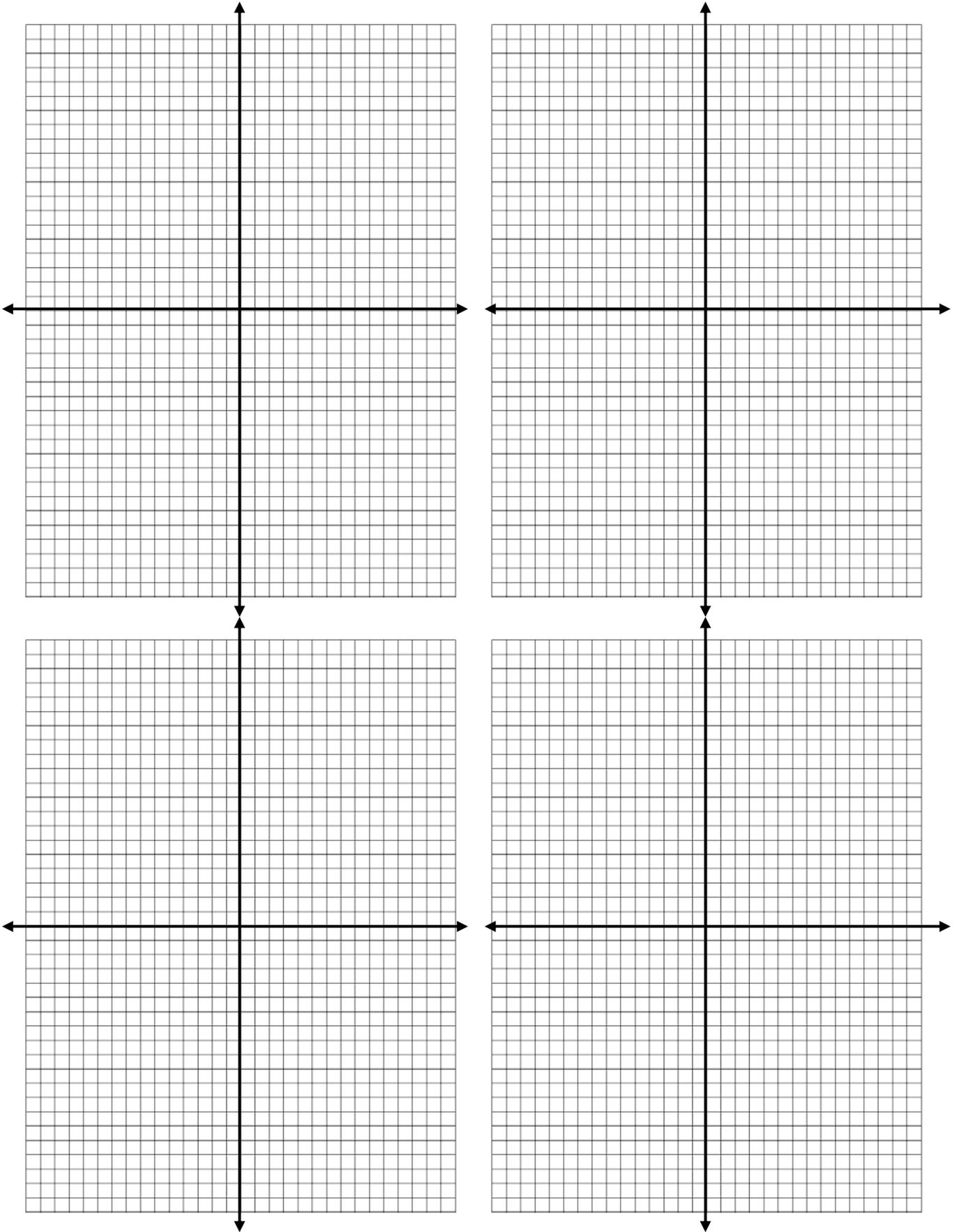
After drawing the six figures, compare Figure 1 to each of the other figures and answer the following questions.

1. Which figures are similar? Explain your thinking.
2. Describe any similarities and/or differences between Figure 1 and each of the other figures.
  - Describe how corresponding sides compare.
  - Describe how corresponding angles compare.
3. How do the coordinates of each figure compare to the coordinates of Figure 1? If possible, write general rules for making Figures 2-6.
4. Is having the same angle measures enough to make two figures similar? Why or why not?
5. What would be the effect of multiplying each of the coordinates in Figure 1 by  $\frac{1}{2}$ ?
6. Translate, reflect, rotate (between  $0$  and  $90^\circ$ ), and dilate Figure 1 so that it lies entirely in Quadrant III on the coordinate plane. You may perform the transformations in any order that you choose. Draw a picture of the new figure at each step and explain the procedures you followed to get the new figure. Use coordinates to describe the transformations and give the scale factor you used. Describe the similarities and differences between your new figures and Figure 1.

Figure 1	Figure 2	Figure 3	Figure 4	Figure 5	Figure 6
<b>Set 1</b>					
(6, 4)	(12, 8)	(18, 4)	(18, 12)	(6, 12)	(8, 6)
(6, -4)	(12, -8)	(18, -4)	(18, -12)	(6, -12)	(8, -2)
(-6, -4)	(-12, -8)	(-18, -4)	(-18, -12)	(-6, -12)	(-4, -2)
(-6, 4)	(-12, 8)	(-18, 4)	(-18, 12)	(-6, 12)	(-4, 6)
<b>Set 2</b>					
(1, 1)	(2, 2)	(3, 1)	(3, 3)	(1, 3)	(3, 3)
(1, -1)	(2, -2)	(3, -1)	(3, -3)	(1, -3)	(3, 1)
(-1, -1)	(-2, -2)	(-3, -1)	(-3, -3)	(-1, -3)	(1, 1)
(-1, 1)	(-2, 2)	(-3, 1)	(-3, 3)	(-1, 3)	(1, 3)
<b>Set 3</b>					
(4, -2)	(8, -4)	(12, -2)	(12, -6)	(4, -6)	(6, 0)
(3, -3)	(6, -6)	(9, -3)	(9, -9)	(3, -9)	(5, -1)
(-3, -3)	(-6, -6)	(-9, -3)	(-9, -9)	(-3, -9)	(-1, -1)
(-4, -2)	(-8, -4)	(-12, -2)	(-12, -6)	(-4, -6)	(-2, 0)
<b>Set 4</b>					
(4, 2)	(8, 4)	(12, 2)	(12, 6)	(4, 6)	(6, 4)
(-4, 2)	(-8, 4)	(-12, 2)	(-12, 6)	(-4, 6)	(-2, 4)









---

## What Does Differentiation Look Like: A True/False Quiz

Directions: Mark the item T if it is TRUE for a differentiated classroom or F if it is FALSE for a differentiated classroom. After you have responded individually, compare your answers to the others in your table group. When you disagree, discuss your various points and attempt to reach consensus.

- \_\_\_\_\_ 1. Allowing all students in the class to complete the same work for a unit/chapter.
- \_\_\_\_\_ 2. Assessing students before a unit of instruction to determine what they already know.
- \_\_\_\_\_ 3. Adjusting the **core** curriculum by content (below to above grade level),
- \_\_\_\_\_ 4. Limiting how and what is taught by teaching to the average student.
- \_\_\_\_\_ 5. Providing assignments tailored for students of different levels of achievement.
- \_\_\_\_\_ 6. Having high expectations for **ALL** students.
- \_\_\_\_\_ 7. Providing educational experiences which extend, replace, or supplement standard curriculum.
- \_\_\_\_\_ 8. Assigning more work at the same level to high achieving students.
- \_\_\_\_\_ 9. Focusing on student weaknesses and ignoring student strengths.
- \_\_\_\_\_ 10. Using activities that **all** students will be able to do.
- \_\_\_\_\_ 11. Structuring class assignments so they require high levels of critical thinking and allow for a range of responses.
- \_\_\_\_\_ 12. Giving the same kind of problems or questions and expecting more.
- \_\_\_\_\_ 13. Creating more work-extra credit, to do when done.
- \_\_\_\_\_ 14. Having students participating in respectful work.
- \_\_\_\_\_ 15. Putting students in situations where they don't know the answer often.
- \_\_\_\_\_ 16. Ensuring that students and teachers collaborating in learning.
- \_\_\_\_\_ 17. Providing free-time challenge activities.
- \_\_\_\_\_ 18. Differing the pace of instruction.
- \_\_\_\_\_ 19. Using capable students as tutors.
- \_\_\_\_\_ 20. Using higher standards when grading.
- \_\_\_\_\_ 21. Blending of whole class, group, and independent learning.
- \_\_\_\_\_ 22. Using individualized instruction.

## ***A Traditional Classroom Compared to a Differentiated One***

### **Traditional Classroom**

### **Differentiated Classroom**

- |  |  |
|--|--|
| 1. Student differences are masked or acted upon when problematic.        | 1. Student differences are studied as a basis for planning.  |
| 2. Assessment is most common at the end of learning to see "who got it." | 2. Assessment is ongoing and diagnostic to understand how to make instruction more responsive to learner need. |
| 3. A relatively narrow sense of intelligence prevails.                   | 3. Focus on multiple forms of intelligence is evident.   |
| 4. A single definition of excellence exists.                             | 4. Excellence is defined by individual growth from a starting point.   |
| 5. Student interest is infrequently tapped.                              | 5. Students are frequently guided in making interest-based learning choices.                                   |
| 6. Relatively few learning profile options are                           | 6. Many learning profile options are provided. taken into account.   |
| 7. Whole class instruction dominates.                                    | 7. Many instructional arrangements are used.   |
| 8. Coverage of texts and/or curriculum guides drives instruction.        | 8. Student readiness, interest, and learning profile shape instruction.  |
| 9. Mastery of facts and skills out-of-context focus of learning.         | 9. Use of essential skills to make sense of the key concepts and principles is the focus of learning.          |
| 10. Single-option assignments are the norm.                              | 10. Multi-option assignments are frequently used.  |
| 11. Time is relatively inflexible.                                       | 11. Time is used flexibly in accordance with student need.   |
| 12. A single text prevails.  | 12. Multiple materials are provided.   |
| 13. Single interpretations of ideas and events                           | 13. Multiple perspectives on ideas and events are routinely sought.  |
| 14. The teacher directs student behavior.                                | 14. The teacher facilitates students' skills at becoming more self-reliant learners.                           |
| 15. The teacher solves problems.   | 15. Students help one another and the teacher solve problems.  |
| 16. A single form of assessment is often used.                           | 16. Students are assessed in multiple ways.  |

Carol Tomlinson

## Name That Graph

 (Adapted from Unit 6 of the Grade 7 Framework.)

**Directions:** Choose three equations and t-charts to graph and answer the questions below. Make sure you get tic-tac-toe.

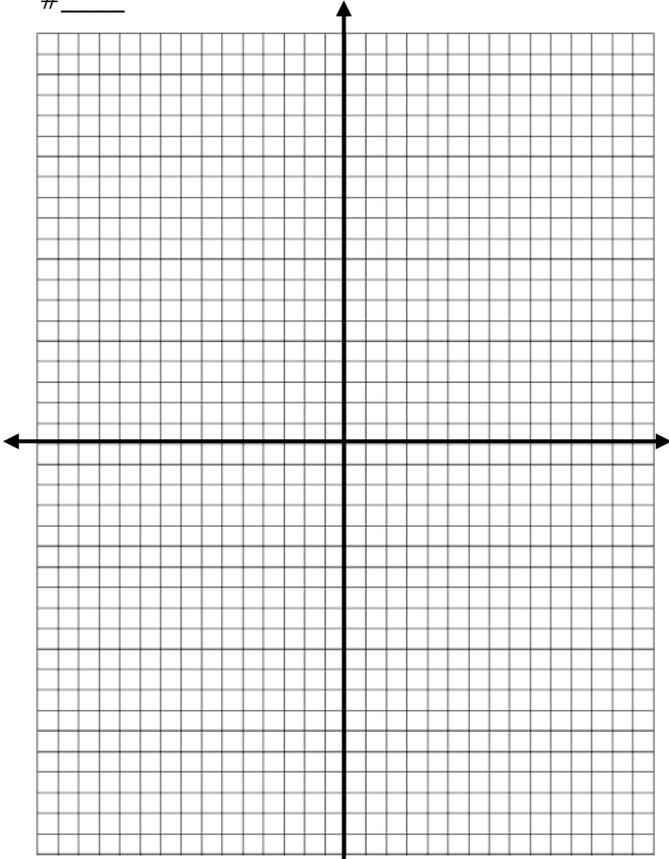
<p>1. <math>y = 2x</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">-1</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">-2</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">3</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">4</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	-1		-2		3		4		<p>2. <math>y = \frac{3}{4}x</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">4</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">8</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">12</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">16</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	4		8		12		16		<p>3. <math>y = 15/x</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">1</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">3</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">5</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">15</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	1		3		5		15			
$x$	$y$																																	
-1																																		
-2																																		
3																																		
4																																		
$x$	$y$																																	
4																																		
8																																		
12																																		
16																																		
$x$	$y$																																	
1																																		
3																																		
5																																		
15																																		
<p>4. <math>y = 3x - 7</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">-6</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">-3</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">3</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">6</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	-6		-3		3		6		<p>5. Make your own equation and t-chart.</p>	<p>6. <math>y = \frac{1}{2}(x) - \frac{1}{2}</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">-2</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">0</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;"><math>\frac{1}{2}</math></td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">3</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	-2		0		$\frac{1}{2}$		3													
$x$	$y$																																	
-6																																		
-3																																		
3																																		
6																																		
$x$	$y$																																	
-2																																		
0																																		
$\frac{1}{2}$																																		
3																																		
<p>7. <math>y = .5/x</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">.25</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">1</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">2</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">3</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">4</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	.25		1		2		3		4		<p>8. <math>y = x / 2 + 1</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">2.6</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">4.7</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">-6</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">-8.5</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	2.6		4.7		-6		-8.5		<p>9. <math>y = x</math></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr><th style="padding: 2px 10px;"><math>x</math></th><th style="padding: 2px 10px;"><math>y</math></th></tr> </thead> <tbody> <tr><td style="padding: 2px 10px;">2</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">4</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">5</td><td style="padding: 2px 10px;"></td></tr> <tr><td style="padding: 2px 10px;">-7</td><td style="padding: 2px 10px;"></td></tr> </tbody> </table>	$x$	$y$	2		4		5		-7	
$x$	$y$																																	
.25																																		
1																																		
2																																		
3																																		
4																																		
$x$	$y$																																	
2.6																																		
4.7																																		
-6																																		
-8.5																																		
$x$	$y$																																	
2																																		
4																																		
5																																		
-7																																		

I am showing all of my work and neatly labeling it for # \_\_\_\_, # \_\_\_\_, # \_\_\_\_, # \_\_\_\_ (optional)

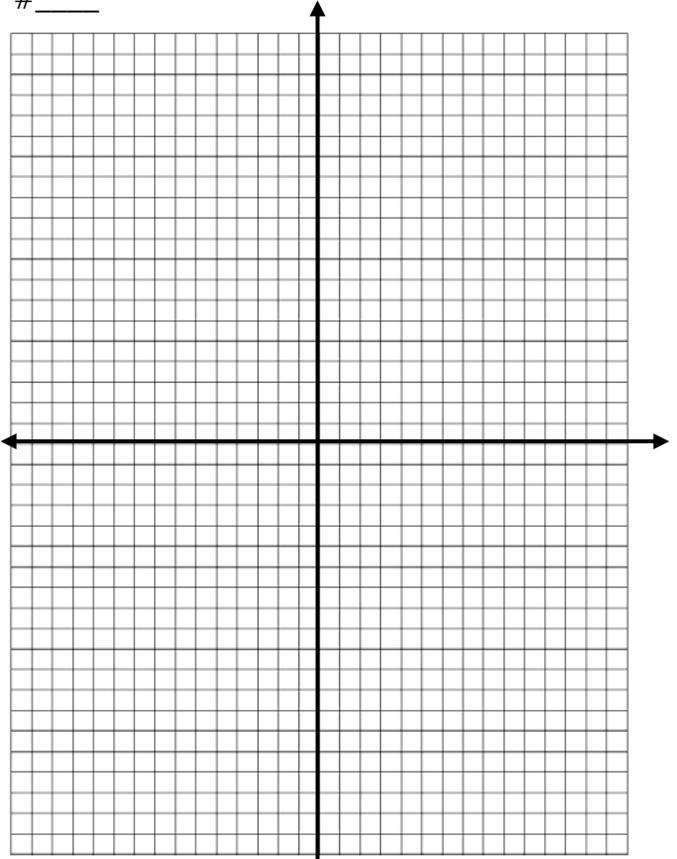
Signature \_\_\_\_\_ Date \_\_\_\_\_

- Tell which of the graphs you picked are directly proportional and how they are alike. Create story problems for them.
- Tell which of the graphs you picked are inversely proportional and how they are alike. Create story problems for them.
- Tell which of the graphs you picked is neither? How can you tell?
- Describe a situation in which both variables would increase, but the relationship would not be directly proportional?
- Describe a situation in which one variable would increase and the other variable would decrease, but the relationship would not be inversely proportional?

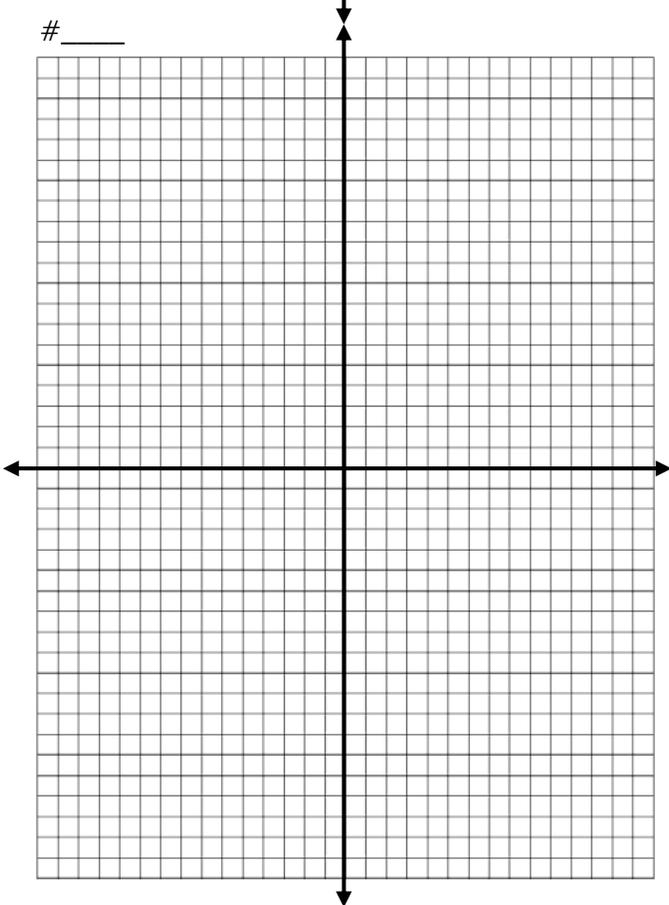
# \_\_\_\_\_



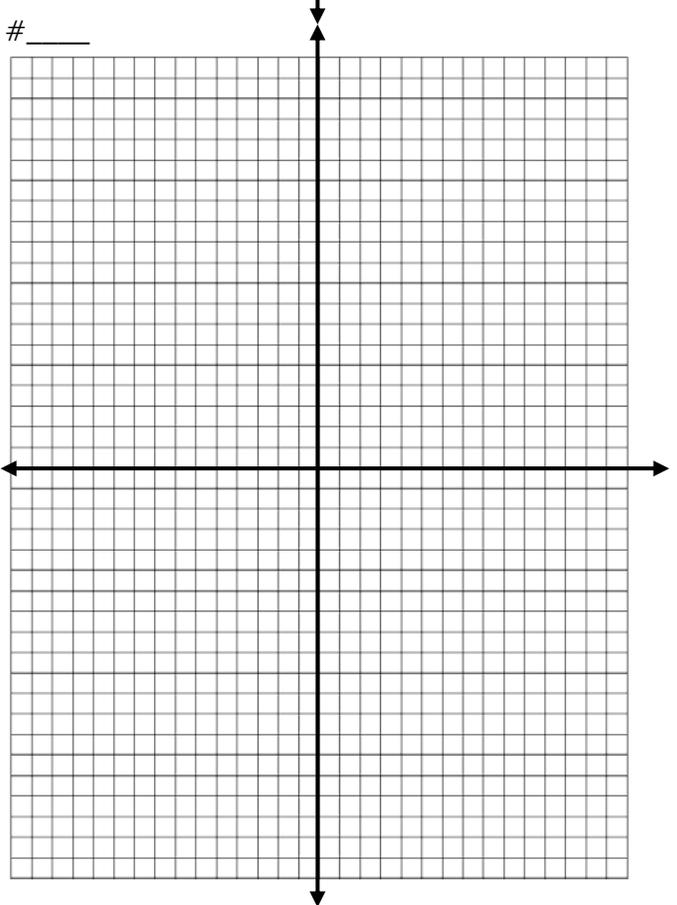
# \_\_\_\_\_



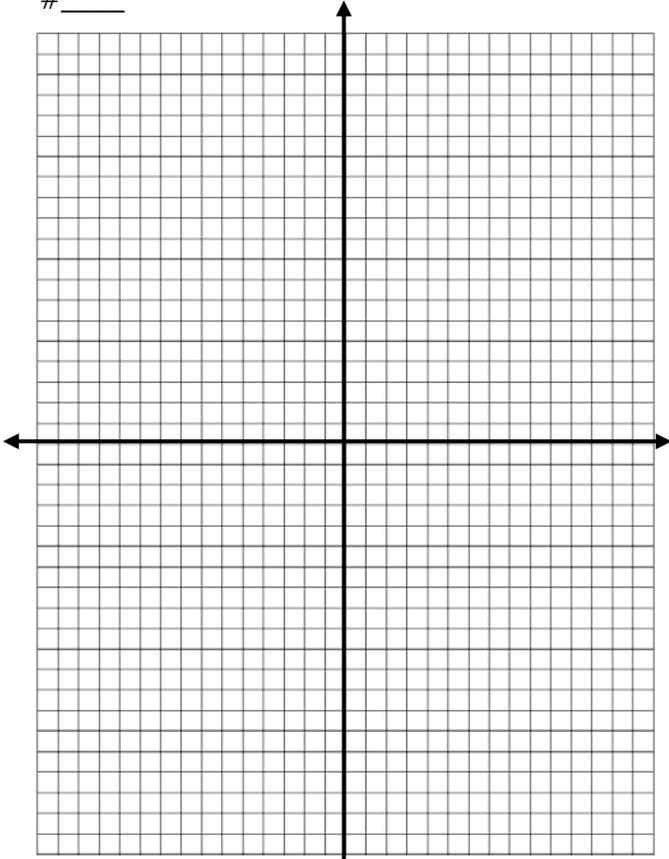
# \_\_\_\_\_



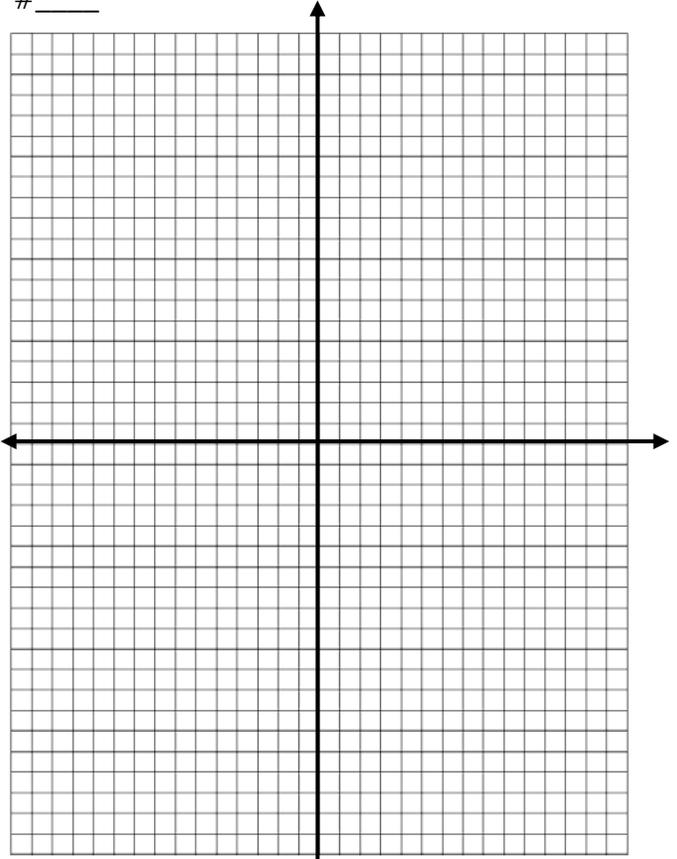
# \_\_\_\_\_



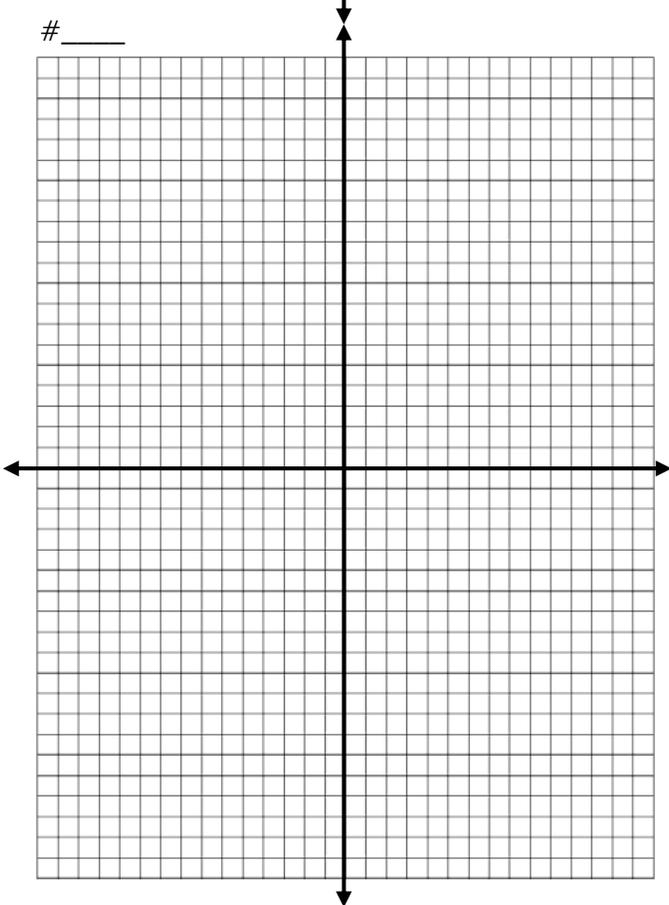
# \_\_\_\_\_



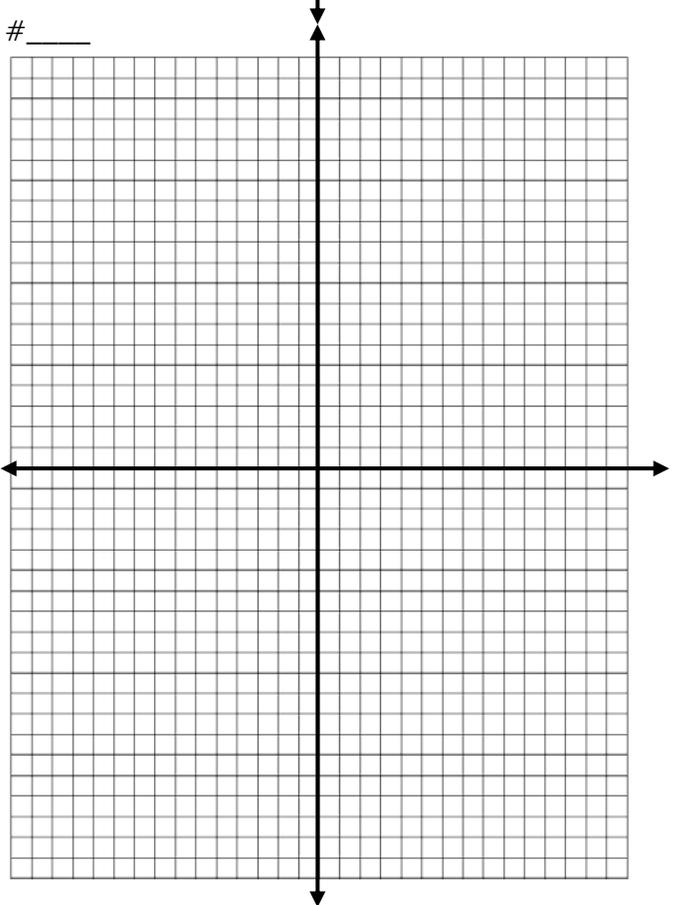
# \_\_\_\_\_



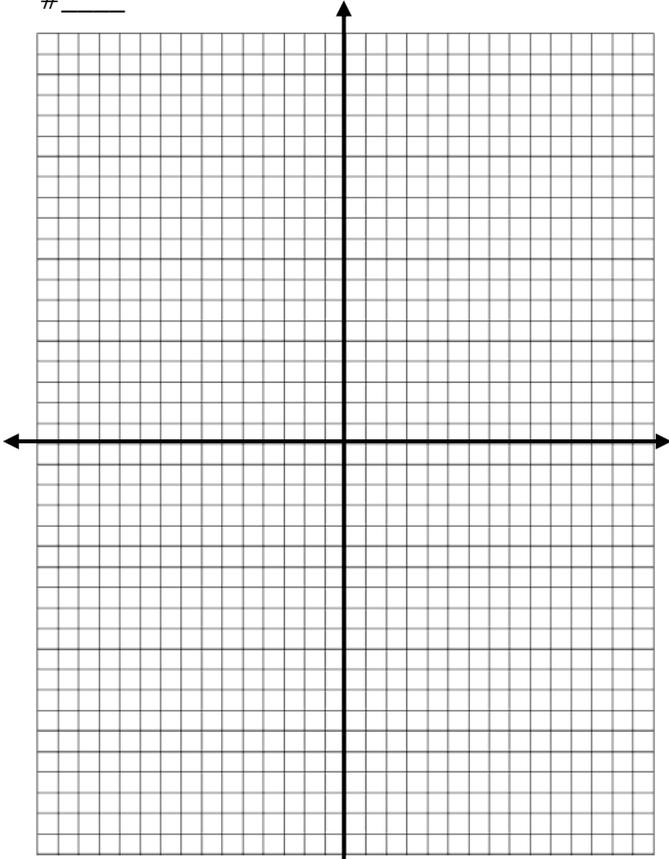
# \_\_\_\_\_



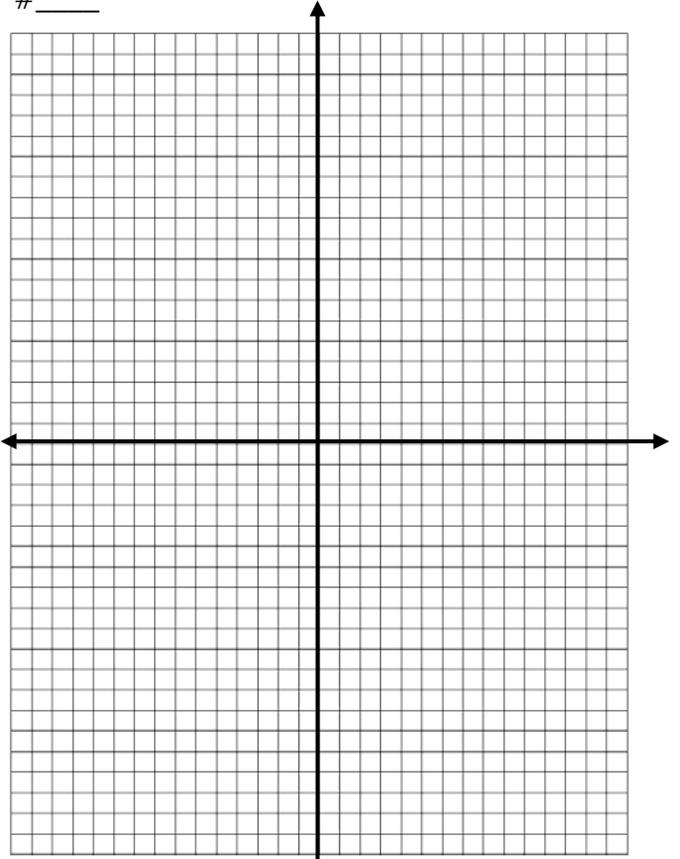
# \_\_\_\_\_



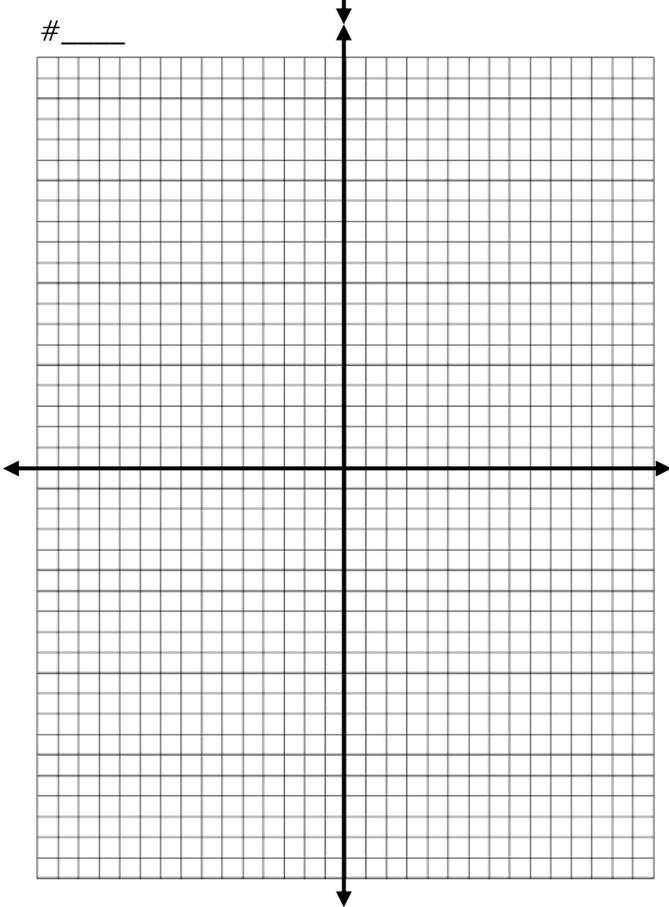
# \_\_\_\_\_



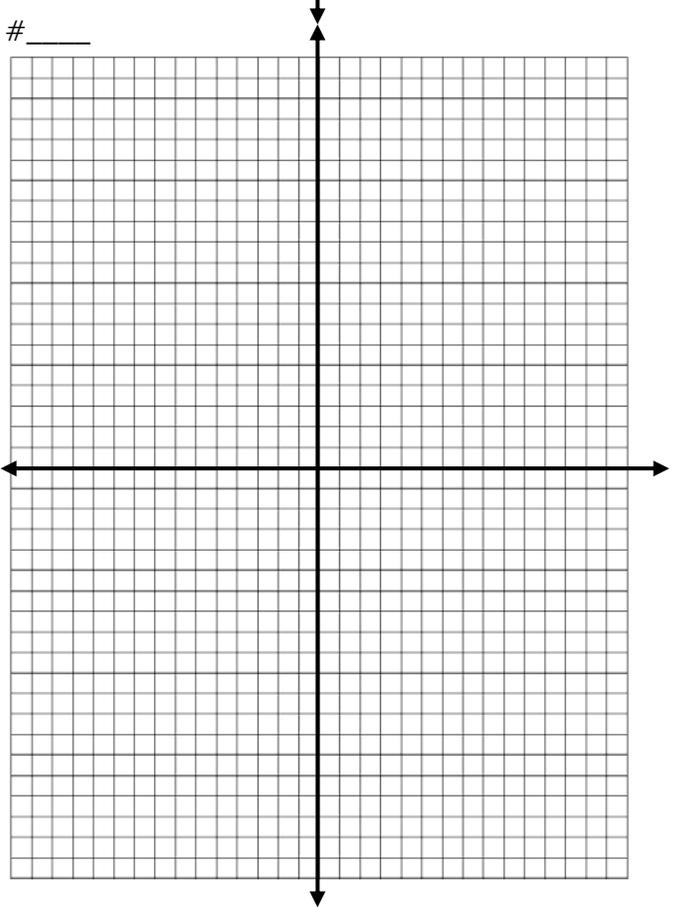
# \_\_\_\_\_



# \_\_\_\_\_



# \_\_\_\_\_





## **Low-Prep and High-Prep Differentiation**

### **Low-Prep Differentiation**

Choice of books  
 Homework options  
 Use of reading buddies  
 Varied journal prompts  
 Orbitals  
 Varied pacing with anchor options  
 Student-teacher goal setting  
 Work alone/work together  
 Whole-to-part and part to whole explanations  
 Flexible seating  
 Varied computer programs  
 Design-A-Day  
 Varied supplementary materials  
 Options for varied modes of expression  
 Varying scaffolding on same organizer  
 Let's Make a Deal projects  
 Computer mentors  
 Think-Pair-Share by readiness, interest,  
     learning profile  
 Use of collaboration, independence, and  
     cooperation  
 Open-ended activities  
 Miniworkshops to reteach or extend skills  
 Jigsaw  
 Negotiated Criteria  
 Explorations by interest  
 Games to practice mastery of information  
     and skill  
 Multiple levels of questions

### **High Prep-Differentiation**

Tiered activities and labs  
 Tiered products  
 Independent studies  
 Multiple texts  
 Alternative assessments  
 Learning contracts  
 4-MAT  
 Multiple intelligence options  
 Compacting  
 Spelling by readiness  
 Entry Points  
 Varying organizers  
 Lectures coupled with  
     graphic organizers  
 Interest groups  
 Tiered centers  
 Interest centers  
 Personal agendas  
 Literature Circles  
 Stations  
 Complex instruction  
 Group investigation  
 Tape-recorded materials  
 Teams, Games, and  
     Tournaments  
 Tic-Tac-Toe  
 Simulations  
 Problem-Based Learning  
 Graduated rubrics  
 Flexible reading formats  
 Student-centered writing  
     Formats

Tomlinson, *How to Differentiate in Mixed-Ability Classrooms*, 34.

## **Redelivery Action Plan**

**Directions:** Complete the following chart to create your individual plan for building a differentiated classroom. Consider the following:

- What am I already doing to differentiate?
- How can I assess and use student readiness, interests, and learning profiles to maximize learning growth for every student?
- How can I differentiate content, process, products, or the learning environment?
- How can I employ Tomlinson's Equalizer to create tiered assignments, activities, tasks, and products?

Step/Activity	Who	By When	How	Resources and Ideas

## **Assignments for Days 6 and 7 of GPS Training**

### **For Day 6 for all grade levels and all content areas:**

Each participant should bring a student work sample to Day 6 of training. This sample should include 4 copies of the student work, 1 copy of the assignment that generated the work including the standard(s) being assessed via this student work, and 1 copy of each of the two permission forms (teacher permission form and student/parent permission form). These forms are in the Participant's Guide for Day 5 of the training and in the back of this guide.

### **For Day 7 for all grade levels and all content areas:**

As you work to implement the GPS standards this first year, please record your experiences in a notebook, journal, or other calendar format. Note any tasks, strategies, assessments, etc., that worked especially well; critical comments about particular standards (e.g., gaps that need filling, elements that are problematic, terms that need defining, etc.); suggestions for teachers/instructional leaders in Phase III who will be implementing the following year; thoughts or ideas about the second year of your implementation; etc. Please bring this record with you to Day 7 of training. The State Board of Education will be reviewing the GPS each year, and your comments will provide information for this review, as well as topics for discussion in training.

## Teacher Permission Form for Student Work

### CONSENT AND ASSIGNMENT

This Consent and Assignment (the "Assignment") is effective when signed by the undersigned Georgia educator ("Educator") and is between Educator and the Georgia Department of Education (the "GDOE"). For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree:

1. GDOE gratefully acknowledges the contribution Educator is hereby making to GDOE of the original work product (the "Work Product") created, developed, worked on or revised by Educator in connection with GDOE's Georgia Performance Standards Project (the "Project"). So that GDOE may fully use the Work Product in any manner it sees fit, including making copies, modifications and derivative works, Educator hereby fully and unconditionally transfers, assigns and conveys to GDOE all of Educator's copyright, ownership interests and other intellectual property rights in the Work Product (collectively, the "Intellectual Property Rights"). Educator further agrees that GDOE may publicly recognize and acknowledge Educator's contribution to, and involvement in, the Project.

2. This Assignment is governed by Georgia law, can only be amended if both parties do so in writing, is assignable solely by GDOE and supersedes any contrary oral or written agreement or understanding. Educator grants to GDOE the power and authority to execute any documentation deemed necessary by GDOE to register or protect the Work Product or Intellectual Property Rights therein or complete the full transfer of the Work Product and Intellectual Property Rights to GDOE which is the purpose of this Assignment.

**"Educator"**

Name:

Signature:

\_\_\_\_\_

Print:

\_\_\_\_\_

**"GDOE"**

Georgia Department of Education

By:

\_\_\_\_\_

Title:

\_\_\_\_\_

Date:

\_\_\_\_\_

## Parent/Guardian Permission Form for Student Work

### CONSENT AND ASSIGNMENT

This Consent and Assignment (the "Assignment") is effective when signed by the undersigned legal guardian ("Guardian") on behalf of the Guardian and minor Georgia student named below ("Student"), and is among Guardian, Student and the Georgia Department of Education (the "GDOE"). For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree:

1. GDOE gratefully acknowledges the contribution Student and Guardian are hereby making to GDOE of the original work product (the "Work Product") created, developed, worked on or revised by Student. So that GDOE may fully use the Work Product in any manner it sees fit in connection with GDOE's Georgia Performance Standards Project (the "Project"), including making copies, modifications and derivative works, Guardian on behalf of Guardian and Student (and their heirs and successors) hereby fully and unconditionally transfer, assign and convey to GDOE all of Student's and Guardian's copyright, ownership interests and other intellectual property rights in the Work Product (collectively, the "Intellectual Property Rights"). Guardian further agrees that GDOE may publicly recognize and acknowledge Student's contribution to, and involvement in, the Project.

2. This Assignment is governed by Georgia law, can only be amended if both parties do so in writing, is assignable solely by GDOE and supersedes any contrary oral or written agreement or understanding. Student grants to GDOE the power and authority to execute any documentation deemed necessary by GDOE to register or protect the Work Product or Intellectual Property Rights therein or complete the full transfer of the Work Product and Intellectual Property Rights to GDOE which is the purpose of this Assignment.

"Guardian"

Signature:

\_\_\_\_\_

Print Name:

\_\_\_\_\_

Guardian's Relationship to Minor:

\_\_\_\_\_

Print Minor's Name:

\_\_\_\_\_

"GDOE"

Georgia Department of Education

By:

\_\_\_\_\_

Title:

\_\_\_\_\_

Date:

\_\_\_\_\_