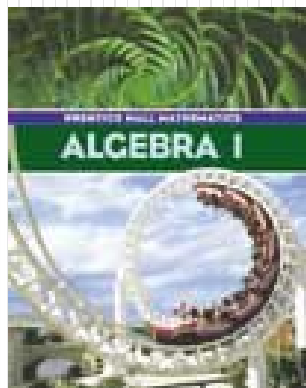
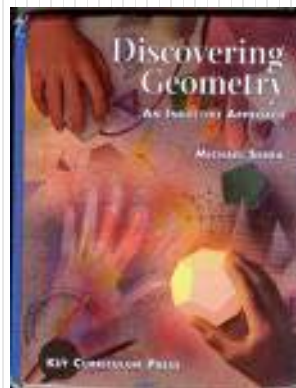


Mr. Northcutt's Math Classes Class Presentation

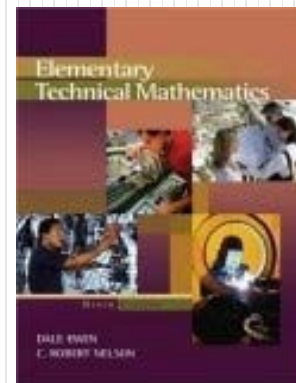
Monday, October 20, 2008 (32)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary

- **Announcements**
 - Chapter 2 Test on Thursday
- **Class Objectives**
 - Problem Solving with Equations
 - Distance, Rate and Time
- **Assignment**
 - Lesson 2-5: 10-15, 21, 24, 27

Distance-Rate-Time Problems

- The relationship between distance-rate-time is:

$$r \cdot t = d$$

Get a Whiteboard!

Same-Direction Travel

1. Draw Picture
2. Setup Table

- One train leaves a station at 1pm travelling at 60 mph. A second high-speed train leaves the same station an hour later travelling at 96 mph. The second train is on a parallel track to the first train. In how many hours will the second train catch up with the first train?
 - **Hint:** Let t represent the time the 1st train travels.

Train	Rate	×	Time	=	Distance
1	60 mph				
2	96 mph				

When Train 2 catches up with Train 1 what is true about the distance the trains have travelled?

$$r \cdot t = d$$

Round-Trip Travel

1. Draw Picture
2. Setup Table

- **Gavin drives to the city to buy software at a computer store. Due to traffic going to the city he averages only 15 mph. While driving home, he averages 35 mph. If the total travel time is 2 hours, how long did it take him to drive to the store?**
 - **Hint:** Let t represent the time for Gavin to drive to the store.

To/From	Rate	\times	Time	$=$	Distance
To Store	15 mph				
From Store	35 mph				

How can we represent the time to drive from store to home in terms of the variable t ?

$$r \cdot t = d$$

Opposite Direction Travel

1. Draw Picture
2. Setup Table

- **Alonna and Tori leave their home traveling in opposite directions on a straight road. Tori drives 15 mph faster than Alonna. After 3 hours, they are 225 miles apart. Find Alonna and Tori's rate (speed)?**
 - **Hint:** Let r represent Alonna's rate (speed).

To/From	Rate	×	Time	=	Distance
Alonna			3		
Tori			3		

How can we represent Tori's rate in terms of r ?

$$r \cdot t = d$$

Math 2 – Daily Summary

- **Announcements**
 - Chapter 4 Test on Monday (next week)
- **Class Objectives**
 - Quiz Summary & Review
 - Slopes of Parallel Lines
 - Slopes of Perpendicular Lines
- **Assignment**
 - Lesson 4.4: 1-15 ODD, 18

Quiz Summary

- **Quiz Results (30 Points Total)**

- Average = 23.4 (**78%**)
- High = 30 (**100%**)
- Low = 12 (**40%**)

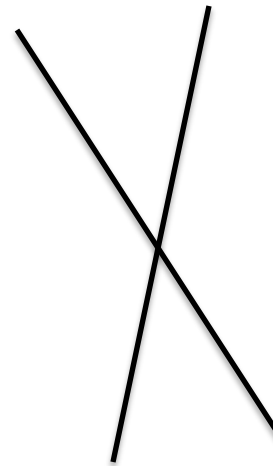
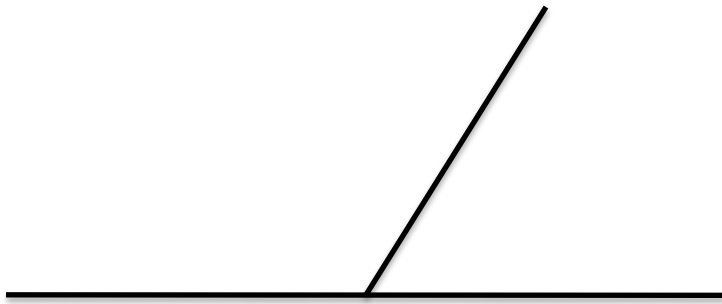
- **Areas for Improvement**

- T/F Problems (How to do them)
- Calculation of Slope and Midpoint
 - By Graphing
 - By Calculation from Endpoints

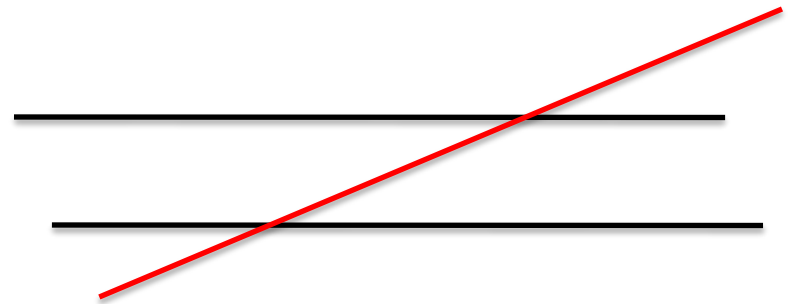
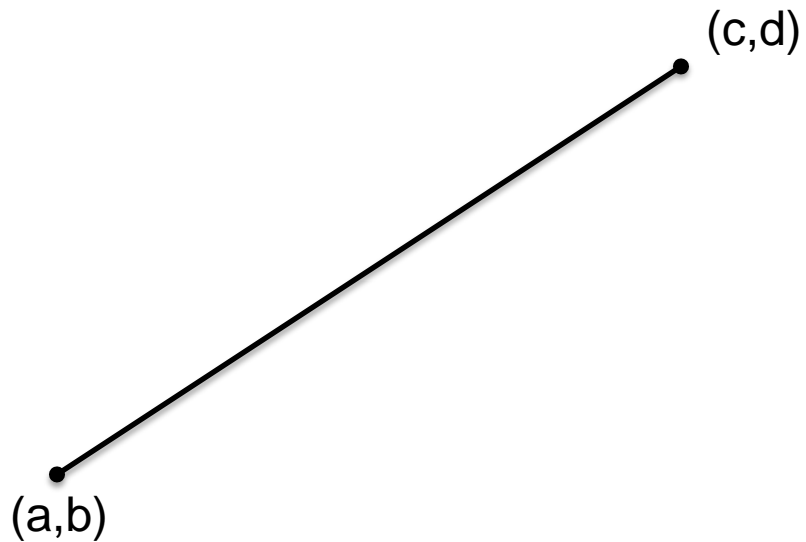
T/F Problems (1-2)

- **Recommended Steps...**

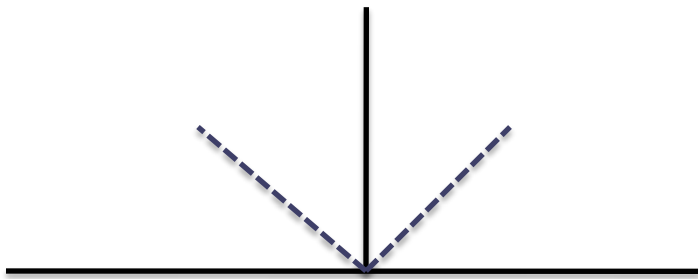
1. Look up definition of ALL terms (as needed)
2. **DRAW A PICTURE!!!**
3. Combine definition(s) & picture to decide whether statement is T/F. **LOOK FOR COUNTEREXAMPLES!**



T/F Problems (3-5)

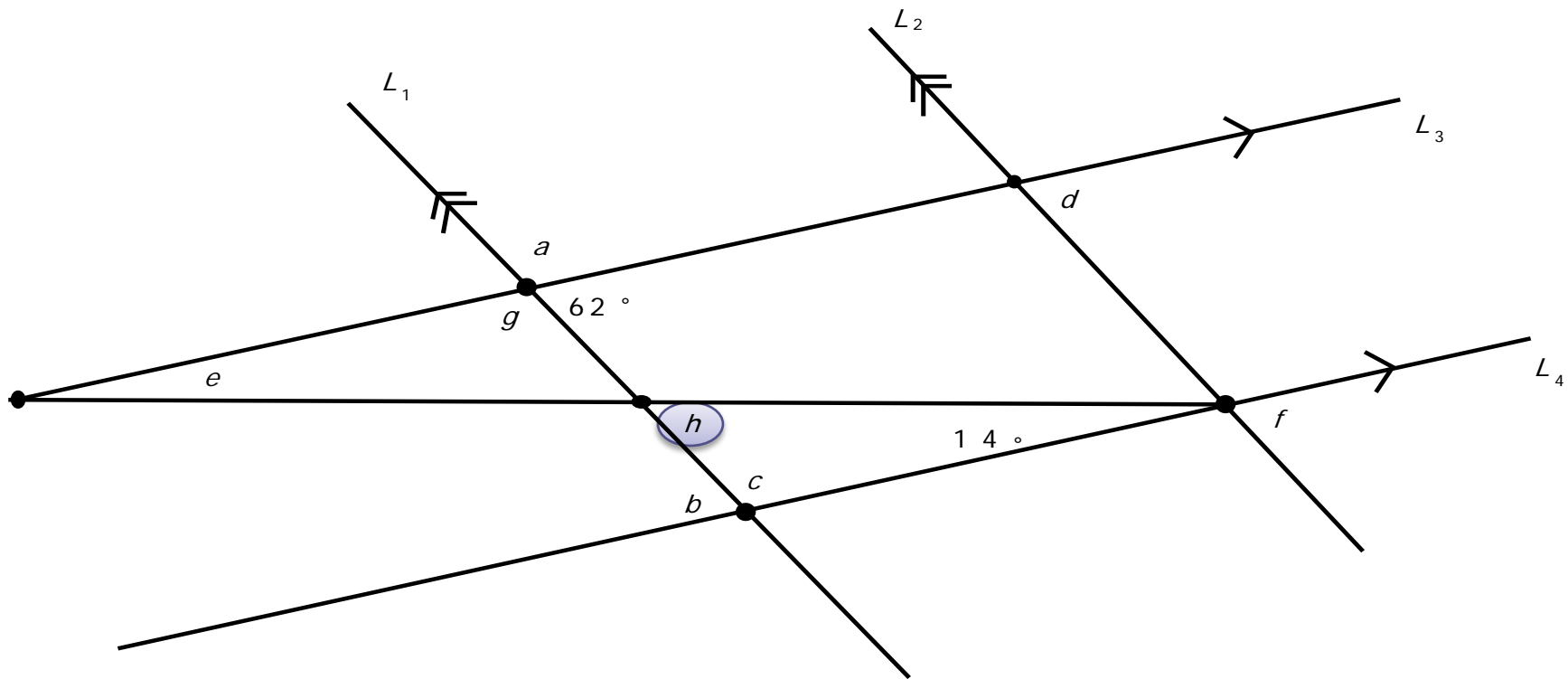


T/F Problems (6-7)



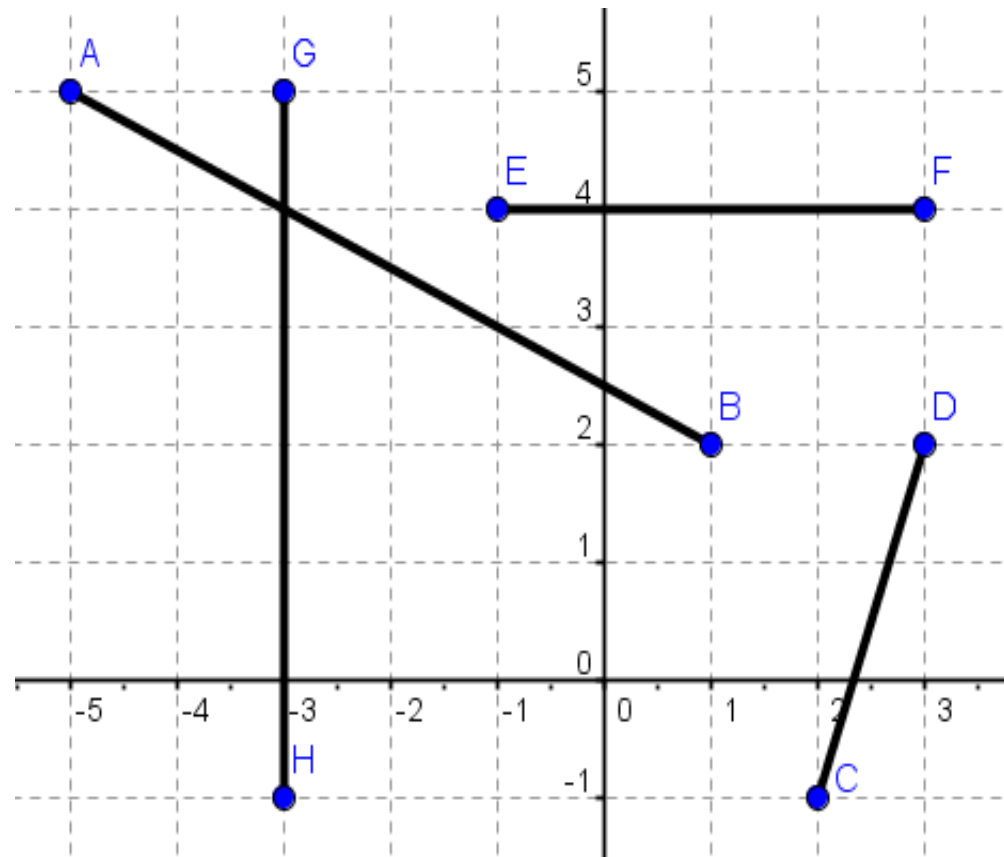
Use Yardsticks for #7.

Part B



Part C (Calculate Midpoint & Slope)

- **X-Axis vs. Y-Axis?**
- **Coordinates of a Point?**
- **What is the Midpoint?**
 - How do you represent?
 - Graph vs. Calculation
- **What is the Slope?**
 - How do you represent?
 - Graph vs. Calculation



Activity: Parallel Lines

Get Whiteboard
& Protractor

- **On Your Whiteboards (suggest using the “Grid” side)**
 - Draw two parallel lines (use grid points)
 - Calculate the slope of each of the lines
- **What conclusion can you draw about their slope?**

Activity: Perpendicular Lines

- **On Your Whiteboards (suggest using the “Grid” side)**
 - Draw two different sets of perpendicular lines
 - Calculate the slope of each of the lines
- **What conclusion can you draw about their slope?**

Parallel & Perp. Line Conjectures

- **Parallel Slope Conjecture**

- In a coordinate plane, two distinct lines are parallel if and only if their slopes are equal.

$$m_1 = m_2$$

- **Perpendicular Slope Conjecture**

- In a coordinate plane, two non-vertical lines are perpendicular if and only if their slopes are negative reciprocals.

$$m_1 = -\frac{1}{m_2}$$

Applied Math – Daily Summary

- **Announcements**

- None

- **Class Objectives**

- Complete Metric Worksheet
 - Discuss Retest Options – How Do You Want to Handle It?
- Project Options
 - Did anyone come up with an idea?
 - ALICE – 3-D Programming
 - Math Relationships

- **Assignment**

- TBD based on Projects Discussion