

Mr. Northcutt's Math Classes Class Presentation

Tuesday, October 21, 2008 (33)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary

- **Announcements**

- Chapter 2 Test on Friday
- Take-Home Test Available Tomorrow

- **Class Objectives**

- Word Problems Review
- Transforming Formulas (Solve for a Variable)

- **Assignment**

- At End of Lesson

HW Solutions – Lesson 2-5

10: $35t=50(t-3/4)$

$t=2.5$ hr, $t-3/4=1.75$ hr

11: $1 \frac{17}{30}$ h

12: x ; $2 \frac{1}{4} - x$

$22x = 72 - 32x$; $1 \frac{1}{3}$ hr

13: x ; $3 - x$

$320x=840 - 280x$; 1.4 hr

14: x ; $x-20$

$4x+4x-80=250$

41.25 mph, 21.25 mph

15: 15 mph; 20 mph

21: 12:30 pm

24: 175 mph; 375 mph

27: truck = 8 h; train = 6 h

Review – Consecutive Integers

Get Whiteboard!

- Find five consecutive odd integers such that the sum of the 1st and the 5th is one less than three times the 4th.

Review – Distance, Rate, Time

- **At 9:00 am your friend begins hiking at 2 mph. You begin from the same place at 9:25 am. You hike at 3 mph.**
 - How long will you have hiked when you catch-up with your friend?
 - At what time will you catch-up with your friend?

Transforming Formulas

- A formula is an equation involving two or more variables.
- Examples:

$$d = rt$$

$$A = \frac{1}{2}bh$$

A = Area of Triangle

b = Base Length

h = Height

$$C = \frac{5}{9}(F - 32)$$

C = Degrees Celsius

F = Degrees Fahrenheit

Transforming Formulas

- You are often required to “transform” a formula in order to “solve for a variable” (isolate the variable on one side of the equation).
 - Use same process that we used to solve equations!
- Example: Solve for h in the formula for area of a triangle.

$$A = \frac{1}{2}bh$$

Practice

NOTE: A variable is only a placeholder for a number!

- **Solve for x:** $y = 5x + 7$

- **Solve for b:** $ab - d = c$

- **Solve for F:** $C = \frac{5}{9}(F - 32)$

Assignment

Lesson 2-6: 1-25 ODD

Math 2 – Daily Summary

- **Announcements**

- Chapter 4 Test on Monday (next week)

- **Class Objectives**

- Equations of Lines

- **Assignment**

- Lesson 4.5: 1-14, 28, 29

$$y = mx + b$$

HW Solutions – Lesson 4.4

1: Perpendicular

3: Perpendicular

5: Neither

7: Neither

9: Quadrilateral

11: Quadrilateral

13: Trapezoid

15: HA=1/6, AN=-6,
ND=1/6, HD=-6,

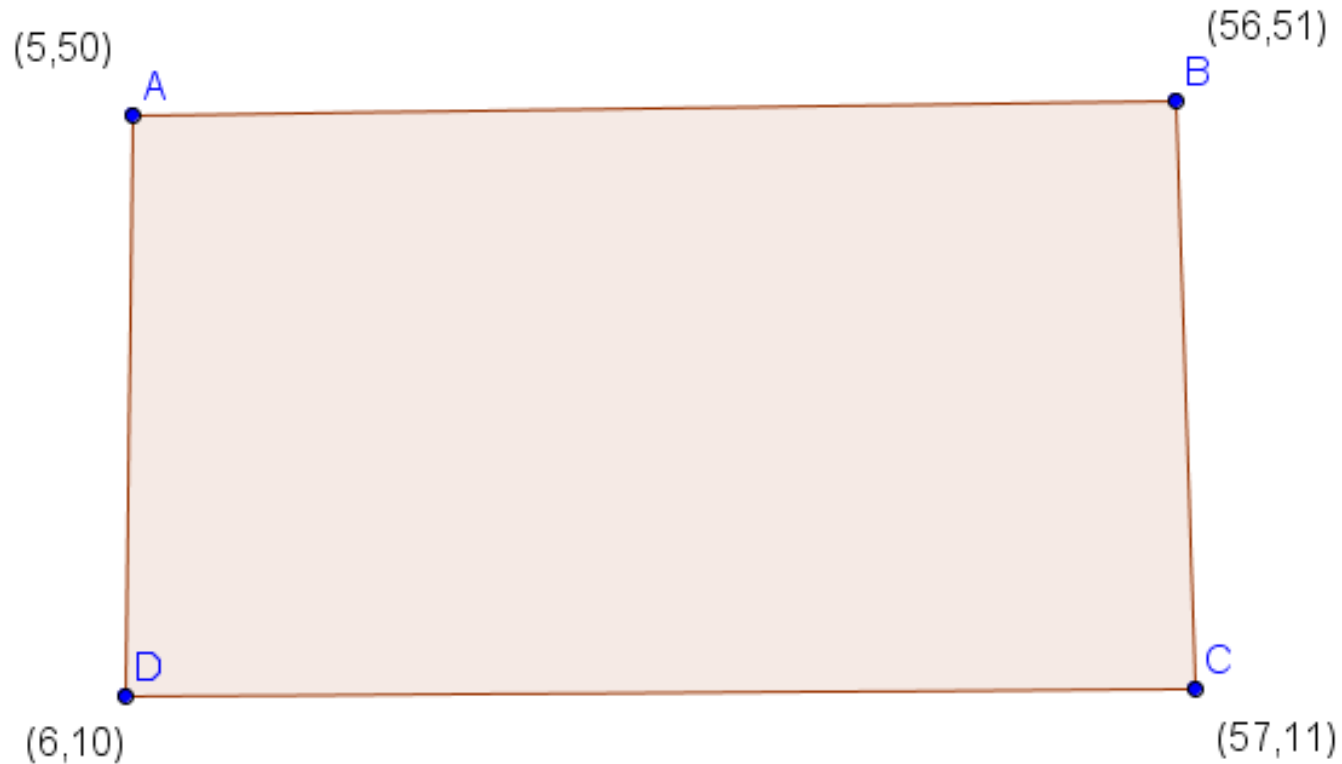
Yes, Yes

$(\frac{1}{2}, 3)$ & $(\frac{1}{2}, 3)$

$$18: y = -\frac{a}{b}x + \frac{c}{b}$$

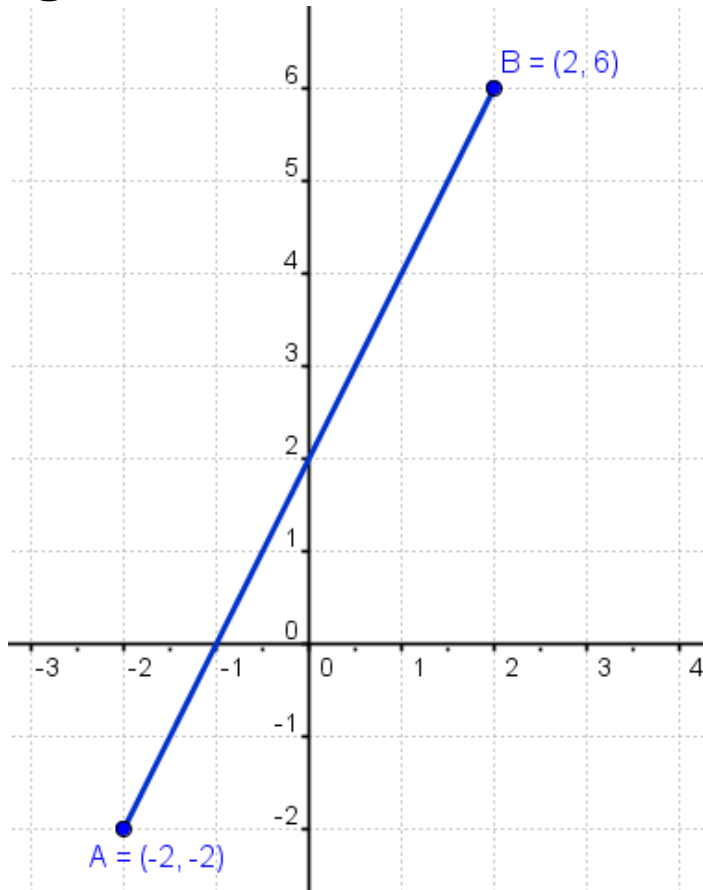
Review

- **Quadrilateral, Trapezoid, Parallelogram or Rectangle?**



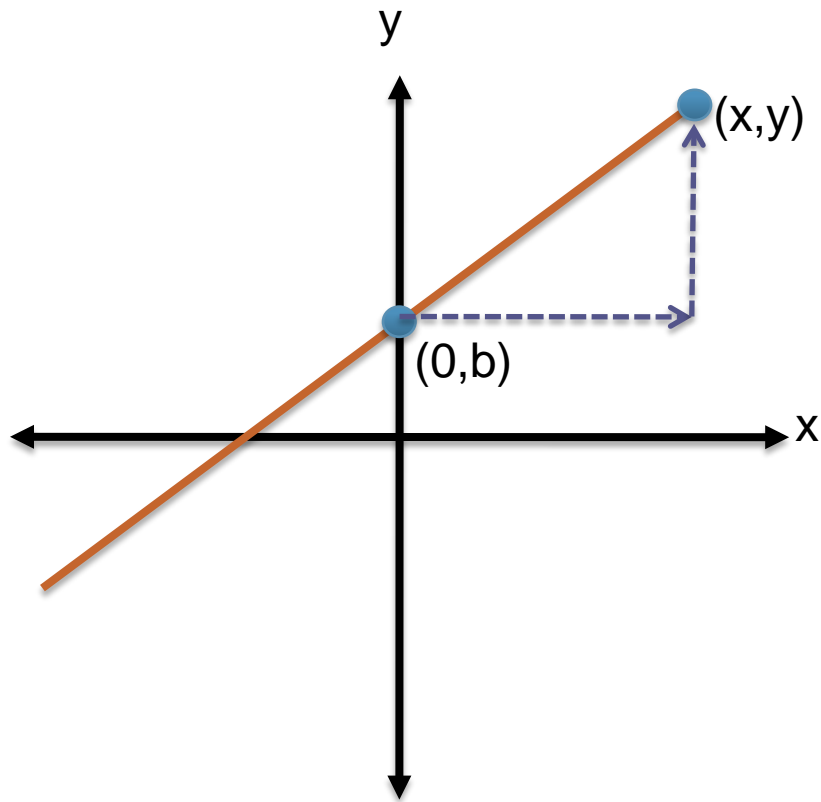
What Uniquely Defines a Line

- **How much information do you need to uniquely define a given LINE?**



Equation of a Line

- Find the slope of the line below.



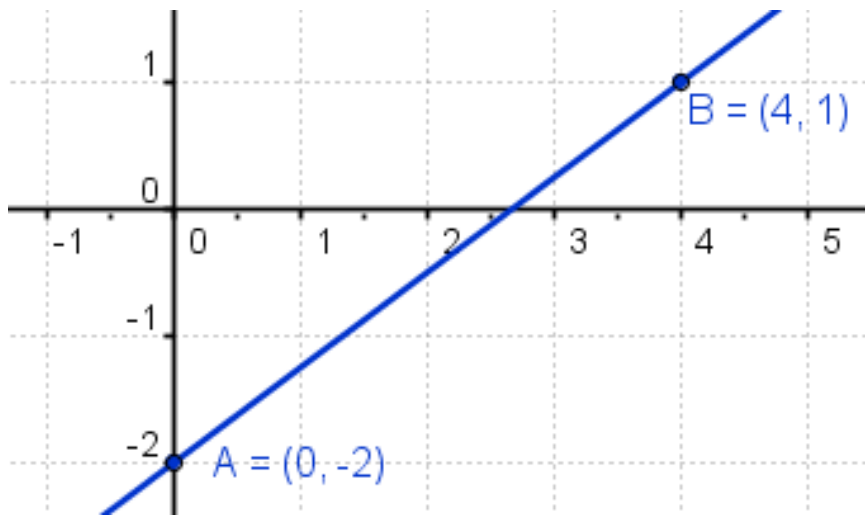
Slope-Intercept Conjecture

- If the graph of a line has a slope (m) and a y-intercept $(0, b)$, then the equation of the line can be written in the form:

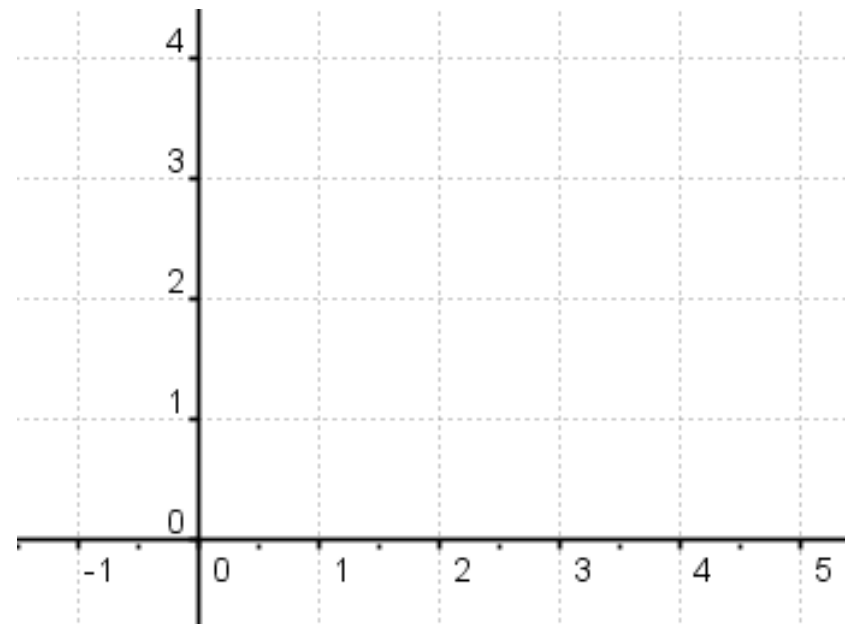
$$y = mx + b$$

Practice

- Find the equation of the line from the graph.

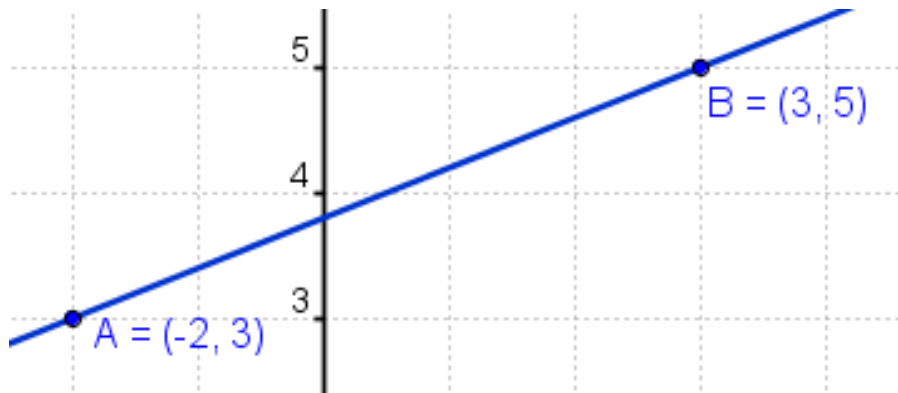


- Graph: $y = \frac{1}{2}x + 2$

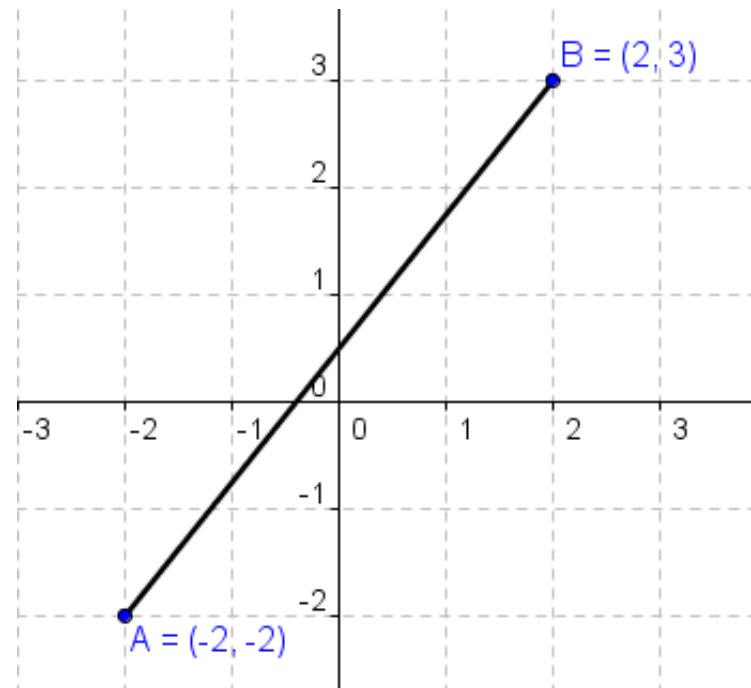


Practice

- Find equation of line AB



- Find equation of perpendicular bisector of segment AB



Applied Math – Daily Summary

- **Announcements**

- Chapter 3 Retest (In Class) Entered in Power School.

- **Class Objectives**

- Excel Overview (High-Level using **Office 2007**)
- **Project:** Calculating Your Grade using Excel
 - **Excel Skills:** DB Concepts, Data Population, Formatting, Formulas
 - **Math Skills:** Formulas, Averages, Percentages, Totals/Subtotals

- **Assignment**

- Complete Part 1 of Project (if not completed in class)