

Mr. Northcutt's Math Classes Class Presentation

February 18, 2009 (104)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary



Get Whiteboard!

- **Announcements**

- QUIZ on Sections 6-1 thru 6-2 on Friday!

- **Class Objectives – *What you should learn today!***

- Reinforce Understanding of “Rate of Change” & “Slope”
- Ability to Calculate the “Rate of Change” from:
 - Data in a Table or Graph
 - Two Points
- Slope of Horizontal and Vertical Lines

- **Assignment**

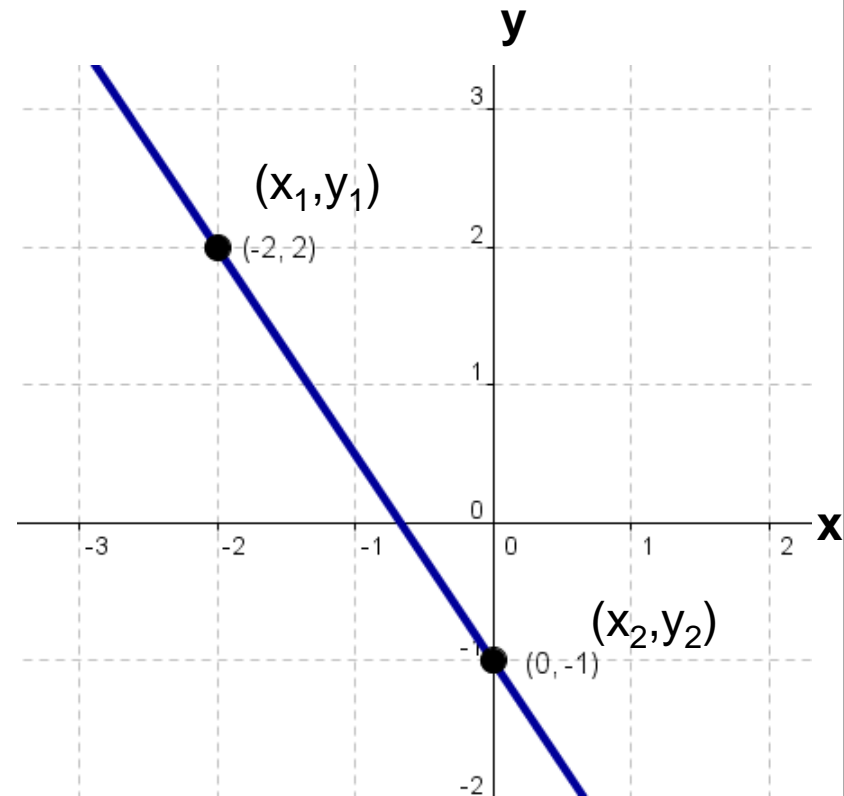
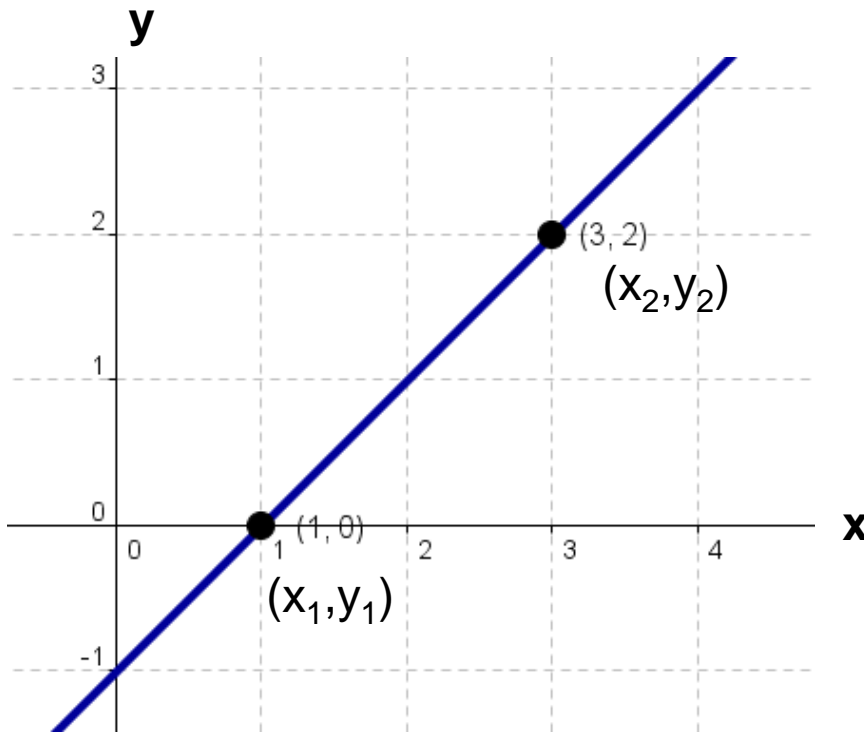
- **Section 6-1:** 7-9, 10-20 EVEN, 22-26, 31-39 ODD



Definition of Slope of a Line

- **Slope of a Line:**

$$\text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$$

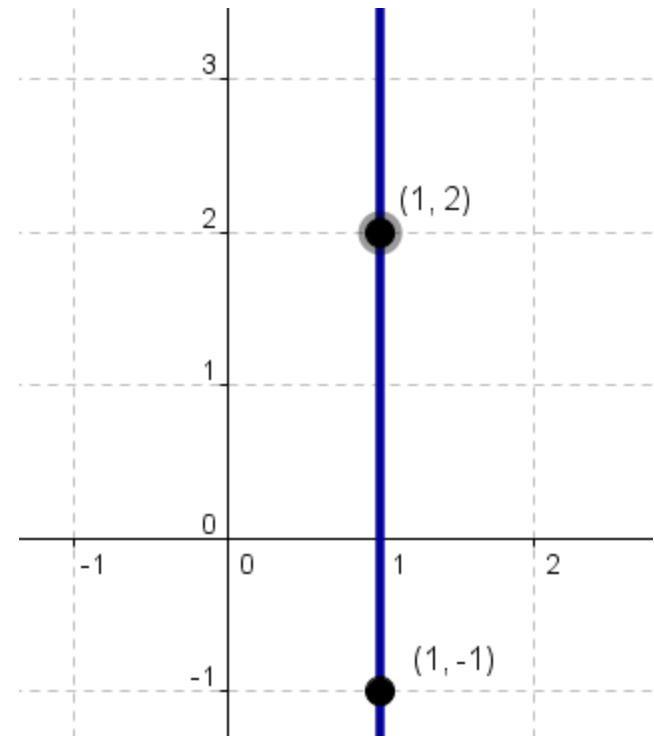
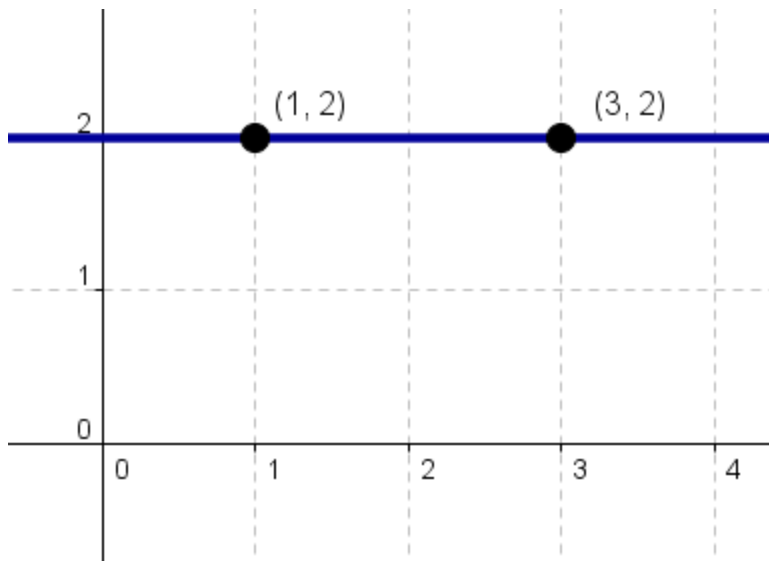




Slope of Horizontal & Vertical Lines

- **Slope of a Line:**

$$\text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$$





Math 2 – Daily Summary

- **Announcements**

- **QUIZ on Lessons 10-1 thru 10-3 on Friday!**

- **Class Objectives – *What you should learn today!***

- Reinforce understanding of the Pythagorean Theorem
- Understand and Use Converse of the Pythagorean Theorem

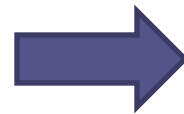
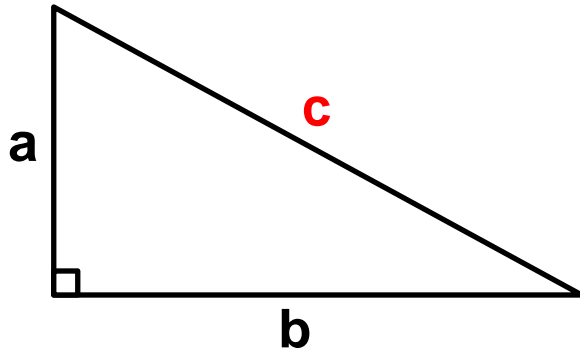
- **Assignment**

- **Section 10.2: 1-10, 12, 15-17**



A Question

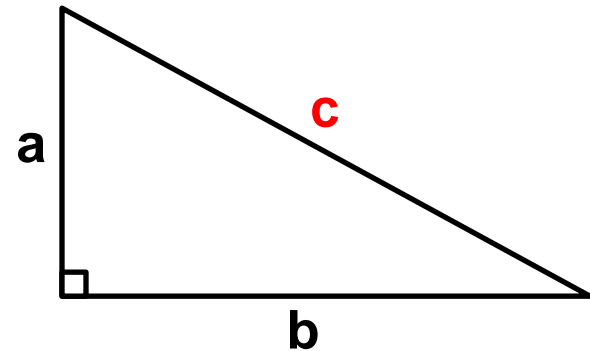
- If a **RIGHT TRIANGLE** satisfies the Pythagorean Theorem



$$a^2 + b^2 = c^2$$

- Then, does a triangle with side lengths that satisfy the Pythagorean formula have to be a Right Triangle?

$$a^2 + b^2 = c^2$$



How would you prove it?



- **Ideas?**

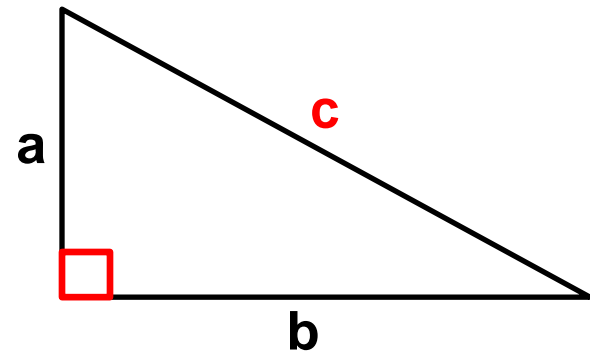
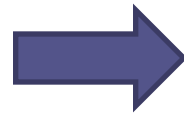
Converse of Pythagorean Theorem



- **Converse of Pythagorean Theorem**

- If the lengths of the three sides of a triangle work in the Pythagorean formula, then the triangle is a RIGHT TRIANGLE.

$$a^2 + b^2 = c^2$$





Common Pythagorean Triples

- **Pythagorean Triples**

- Three positive integers that satisfy the Pythagorean formula.

3-4-5

5-12-13

6-8-10

8-15-17

9-12-15

7-24-25

12-16-20

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What is going on here?



Applied Math – Daily Summary

- **Announcements**

- Math-Caching Project this Week!

- **Class Objectives – *What you should learn today!***

- Review Math Caching Project Rubric (grading criteria)

- **Assignment**

- Continue Math Caching Project