

# Mr. Northcutt's Math Classes Class Presentation

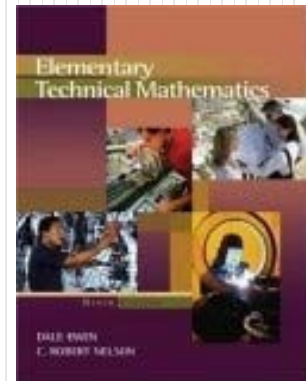
January 27, 2009 (90)



Math 1



Math 2



Applied Math



# Math 1 – Daily Summary

- **Announcements**

- **Beginning Semester 2 – A “Clean Slate”**

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

- Class Overview & Recommendations

- Math Classes Website
- Grading Policy (Quarter: 10/90 & Semester: 40/40/20)
- Classroom Etiquette & a “Typical” Day
- Recommendations:
  - Notebooks; Before/After School; Contact Me – Before There is a Problem!
  - Respect Everyone and Have Fun While You Learn!

- Understanding Graphs

- **Assignment**

- **Lesson 5-1: 1-11, 13, 14**



# Proficiency – Integer Operations

- **Most Missed (8/4 out of 36)...Simplify:**

$$100 - (-20)$$

$$12 - 20$$



# Graphing Points Given Coordinates

- **Graphs:**

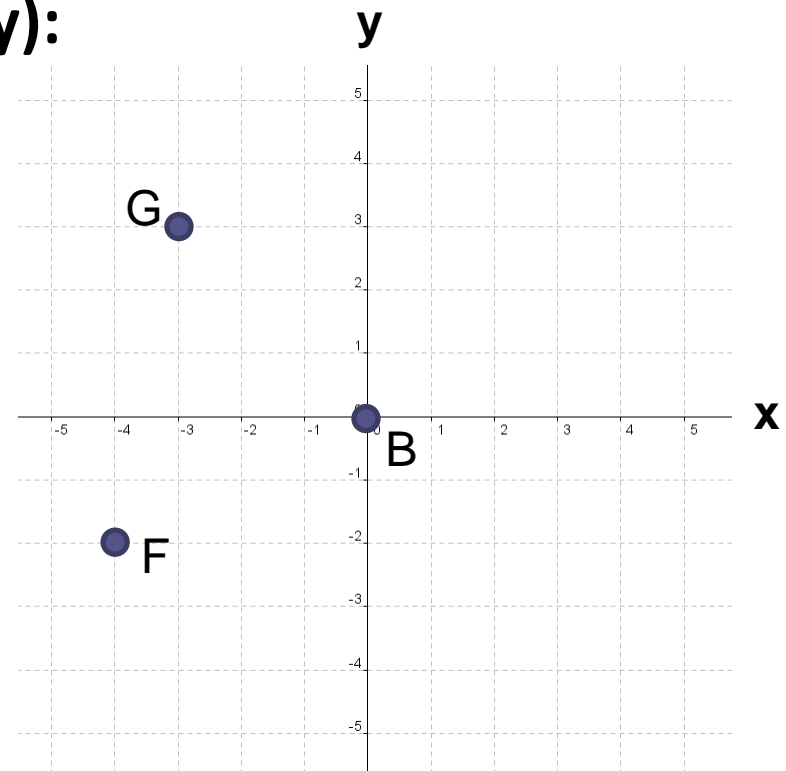
- Show **RELATIONSHIPS** between variables
- **COMMUNICATE** information about the relationship

- **Graph the following points (x,y):**

- (4,-2)
- (4,3)
- (2,-4)
- (-2,1)

- **What are coordinates of:**

- Point B
- Point F
- Point G



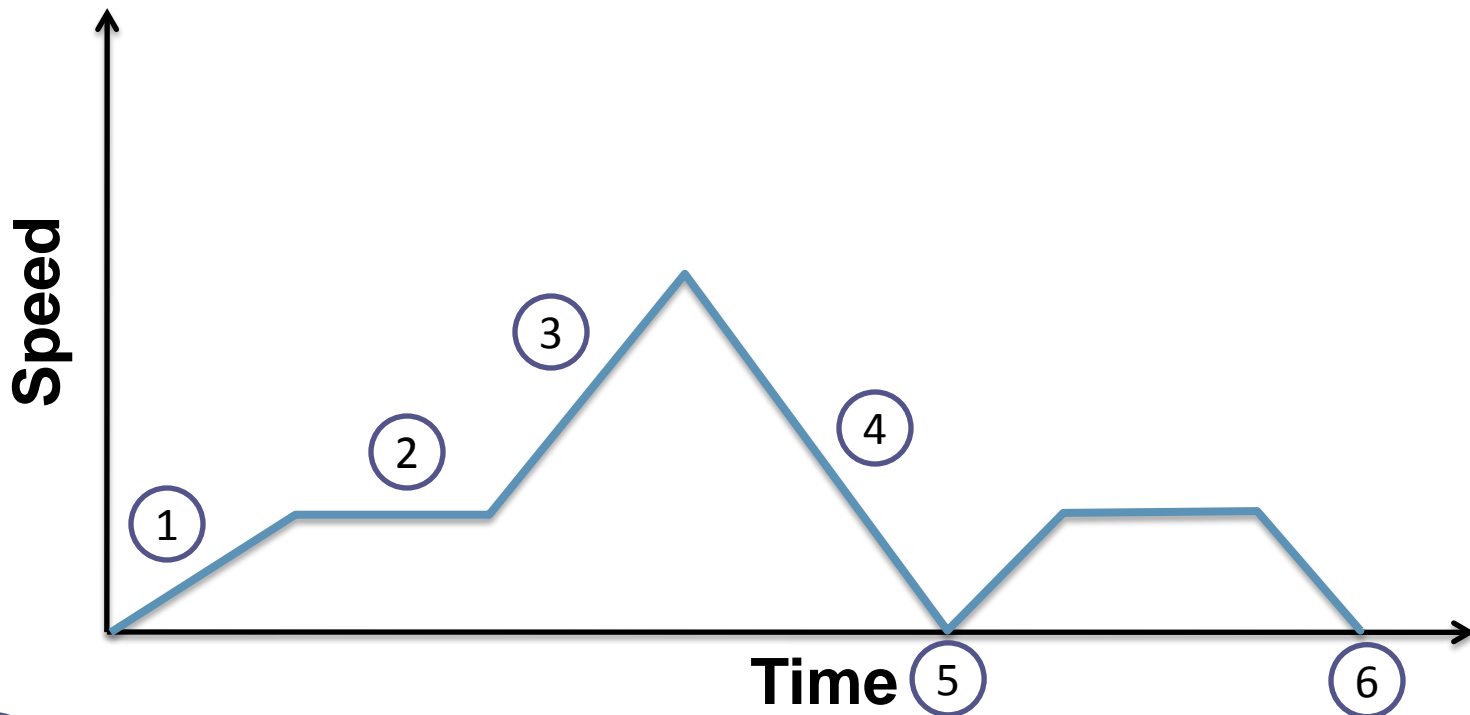


# Interpreting Graphs

- **It's All About RELATIONSHIPS!!!**

- What information is being related – the axes of the graph?
- What does the graph communicate about the relationship?

## Bus Trip to School





# Drawing a Graph

- **A plane is flying from NY to London. Sketch a graph showing the relationship between altitude and time.**

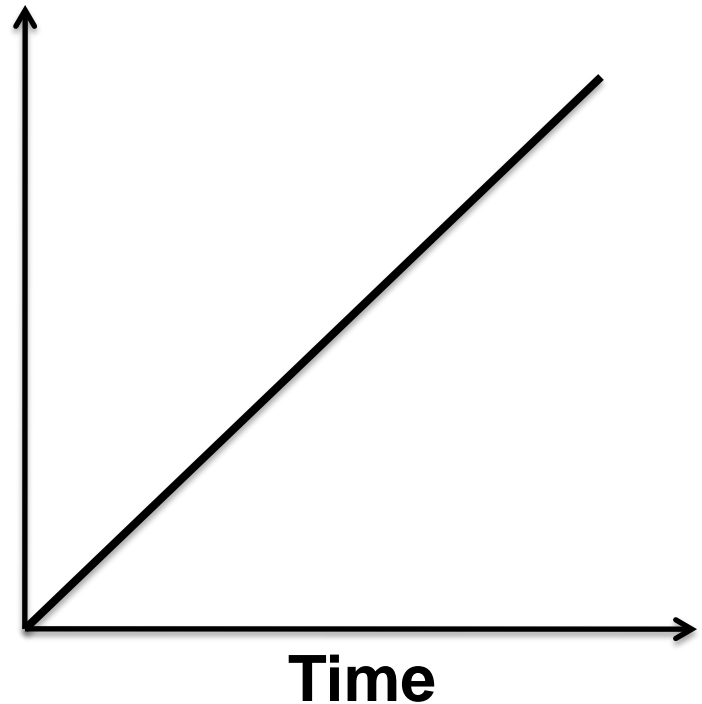
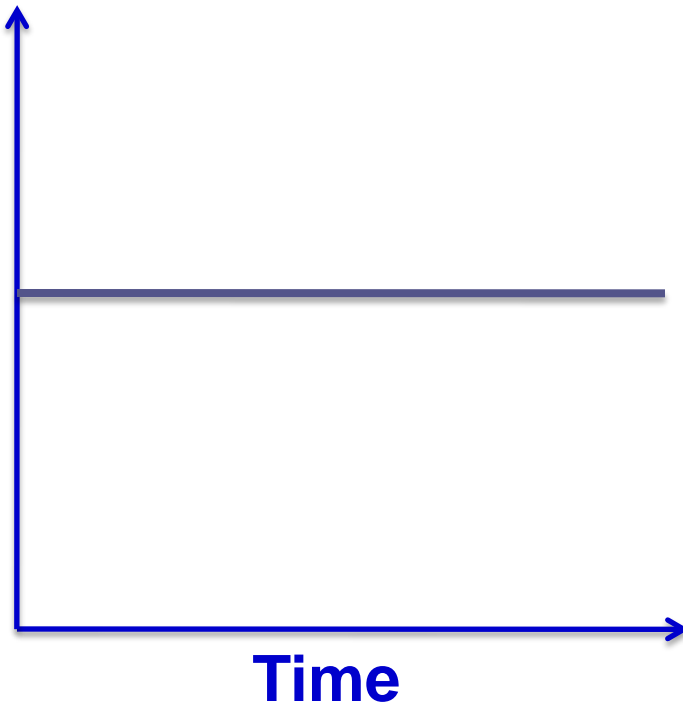
1. Graph Title
2. Axes Labels
3. "Section" Labels





# Analyzing Graphs

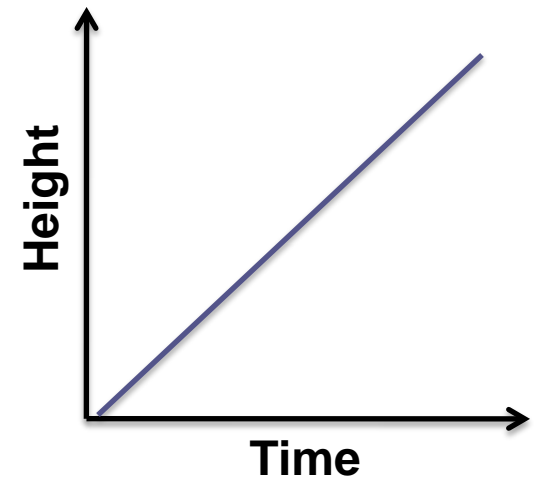
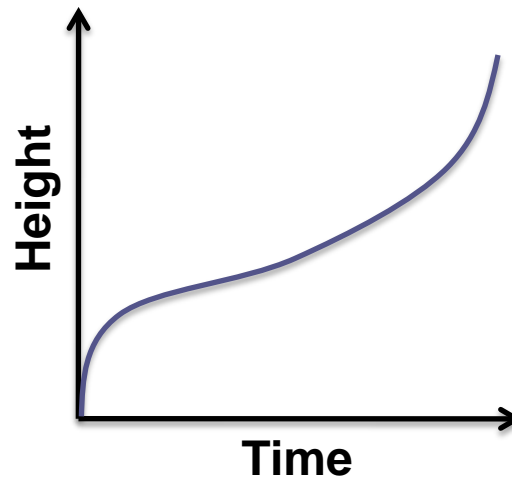
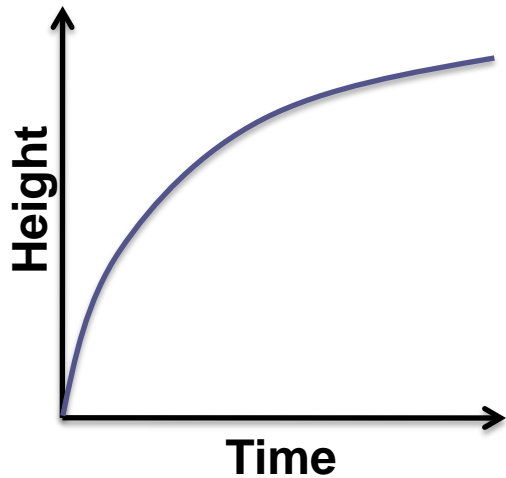
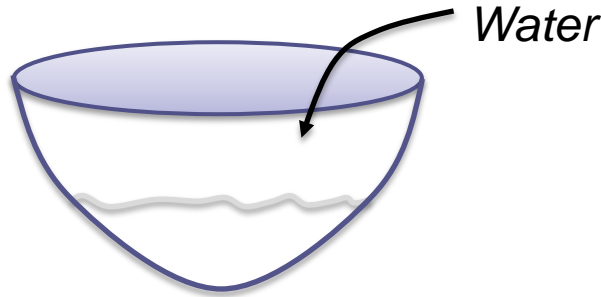
- A car travels at a constant speed. Which graph could (a) show the Speed of the car and (b) show the Distance the car travelled?





# Analyzing Graphs

- Suppose you pour water into the container at a steady rate. Which graph show the change in the height of the liquid?







# Math 2 – Daily Summary

- **Announcements**

- **Beginning Semester 2 – A “Clean Slate”**

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

- Class Overview & Recommendations

- Math Classes Website
- Grading Policy (Quarter: 10/90 & Semester: 40/40/20)
- Classroom Etiquette & “Typical” Day
- Recommendations:
  - Notebooks; Before/After School; Contact Me – Before There is a Problem!
  - Respect Everyone and Have Fun While You Learn!

- Area of Rectangles and Parallelograms

- **Assignment**

- **Lesson 9.1: 1-22, 25-26**

# Order of Operations (GEMDAS)



- **Most Missed (15/10 out of 41)...Simplify:**

$$3 - 2(3 + 2 \div 2)$$

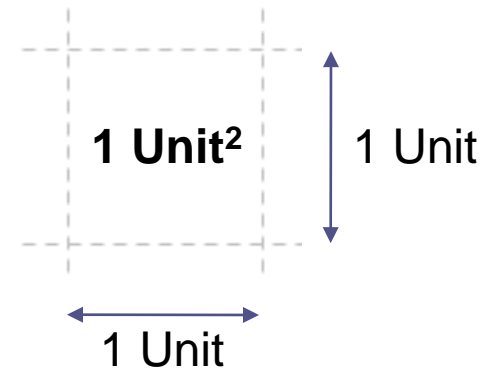
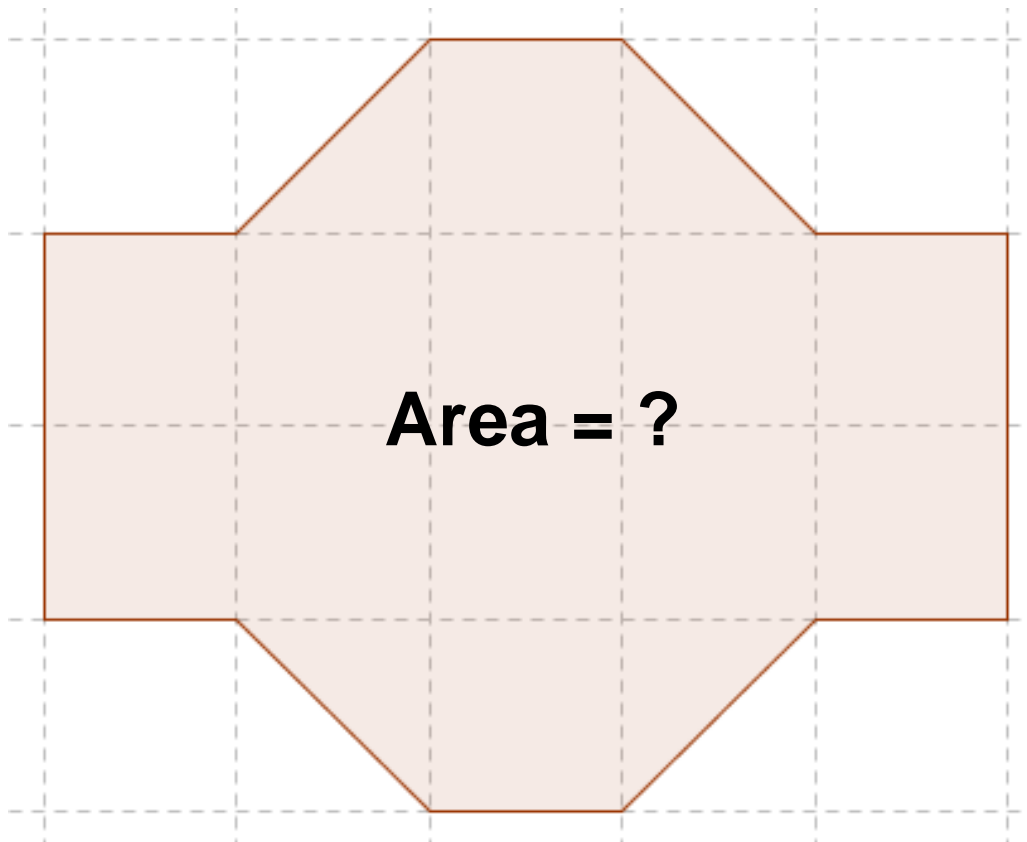
$$2(4 - (3 + 2))$$



# Calculating Area

- **Area:**

- The measure of the region enclosed by the figure.



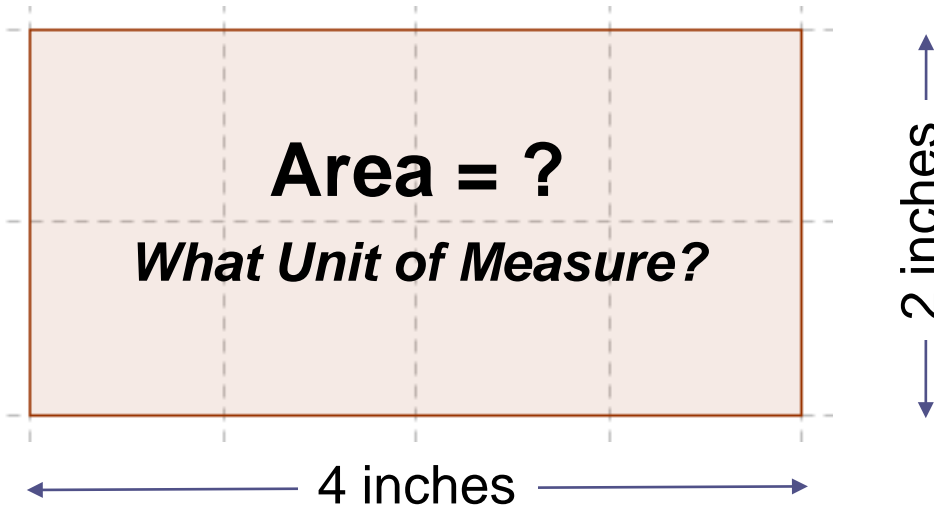


# Area of a Rectangle

- **Area of a Rectangle:**

$$A = b \cdot h$$

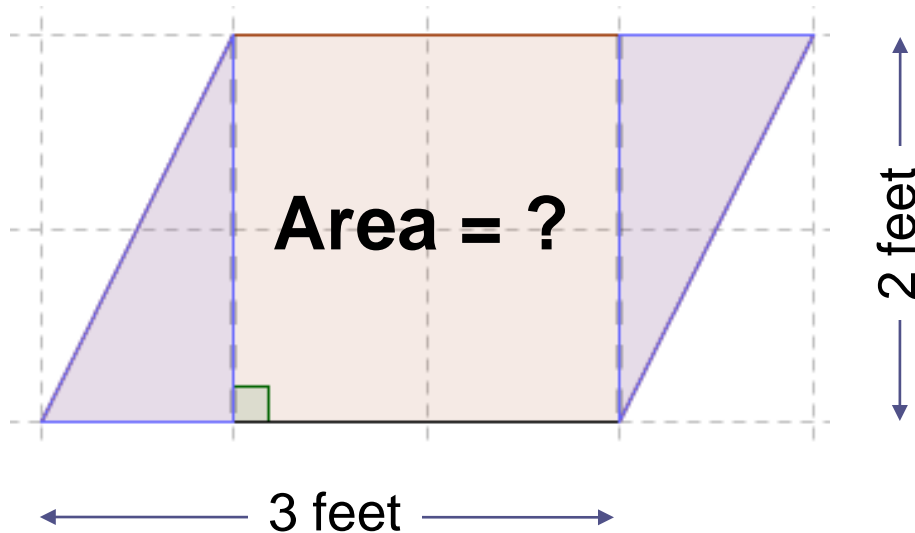
- Where **A** is the area, **b** is the length of the base, and **h** is the height of the rectangle.





# Area of a Parallelogram

- **Area of a Parallelogram:**  $A = b \cdot h$ 
  - Where **A** is the area, **b** is the length of the base, and **h** is the height of the parallelogram.



# Example (Words→Picture→Algebra)



- **What is the height of a parallelogram with an area of 12  $\text{yd}^2$  and a base length of 3 feet?**
  
- **What is the area of rectangle with a base length of 50 cm and a height of 1 m?**



# Quadratic Equations → Area

- Consider the following polynomial expression:

$$(x + 3)(x + 8) = x^2 + 11x + 24$$

<b>x</b>	$x^2$	$8x$
<b>+</b>		
<b>3</b>	$3x$	$24$
	<b>x</b>	<b>+</b> <b>8</b>



# Applied Math – Daily Summary

- **Announcements**
  - **Beginning Semester 2 – A “Clean Slate”**
- **Class Objectives – *What you should learn today!***
  - Geometric Art Project
    - Research & Documentation (25%)
    - Artwork (75%)
- **Assignment**
  - Geometric Art Project