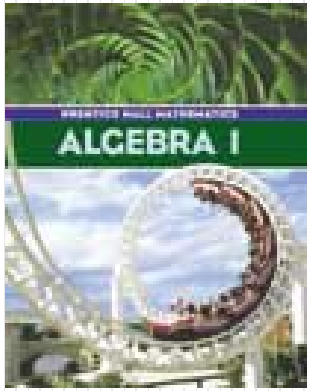
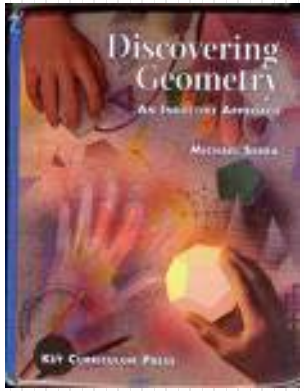
Mr. Northcutt's Math Classes
Class Presentation

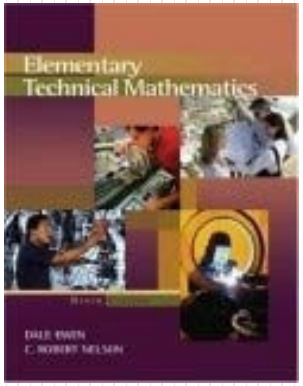
January 28, 2009 (91)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary

- **Announcements**
  - **Quiz on 9.1-4 on Tuesday (2/6)!**
- **Class Objectives – *What you should learn today!***
  - Review Plan for Substitute Days (Thursday & Friday)
  - A Lot – Many New Concepts:
    - Relation - Domain & Range
    - Function (Vertical Line Test)
    - Function Rule (Input & Output), Function Notation
  - Ability to Identify the Domain & Range of a Function
- **Assignment**
  - **Lesson 5-2**: 2-26 EVEN, 34-40, 43-46

Proficiency – Order of Operations

- **Most Missed (8/9/10 out of 36)…Simplify:**

G E M D A S

$$5+3(8-6)$$

$$2^3+\frac{3^2\cdot 7}{3}$$

$$(1-4)^2+(5)(-2)$$

G E M D A S

Relations – Domain & Range

- **RELATION:** Set of Ordered Pairs – Shows a RELATIONSHIP!

Age (Years)	Weights (Pounds)	
5	45	(5,45)
10	90	(10,90)
20	165	(20,165)
40	165	(40,165)
75	155	(75,155)

DOMAIN – *First Coordinate*

{5, 10, 20, 40, 75}

RANGE – *Second Coordinate*

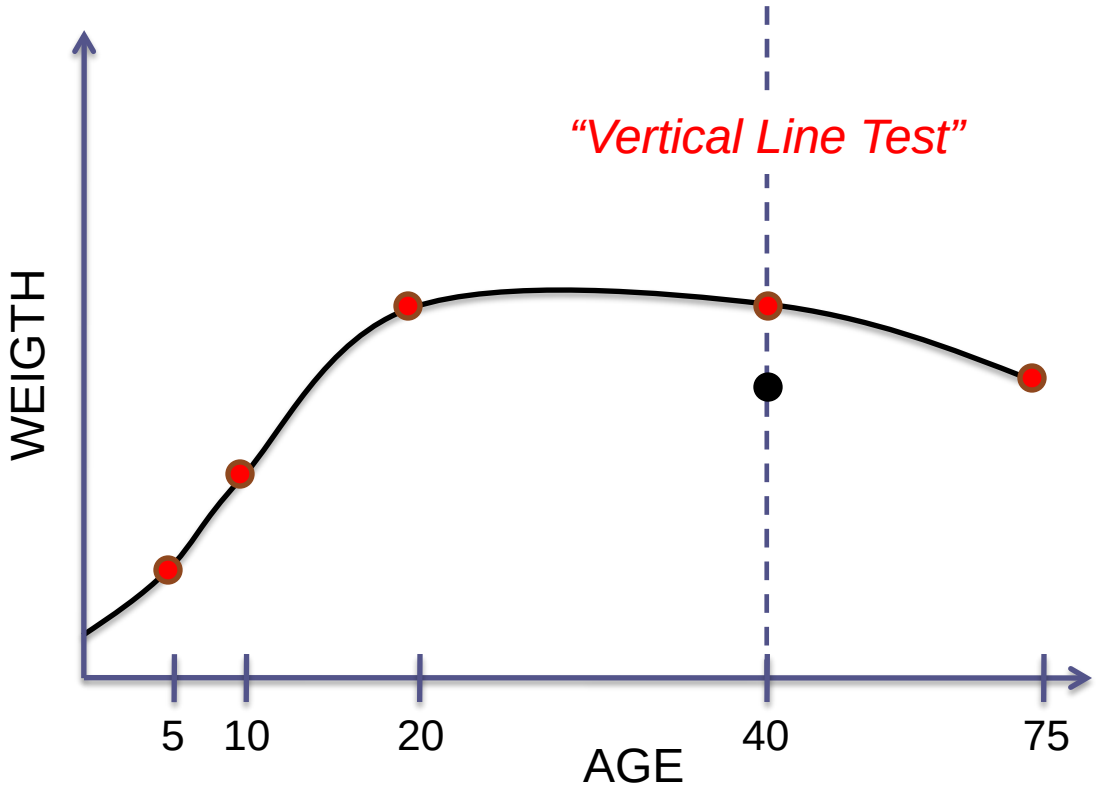
{45, 90, 165, 155}

- **Do NOT Repeat Values**
- **Order from Lowest to Highest**

Functions – "Special" Relations

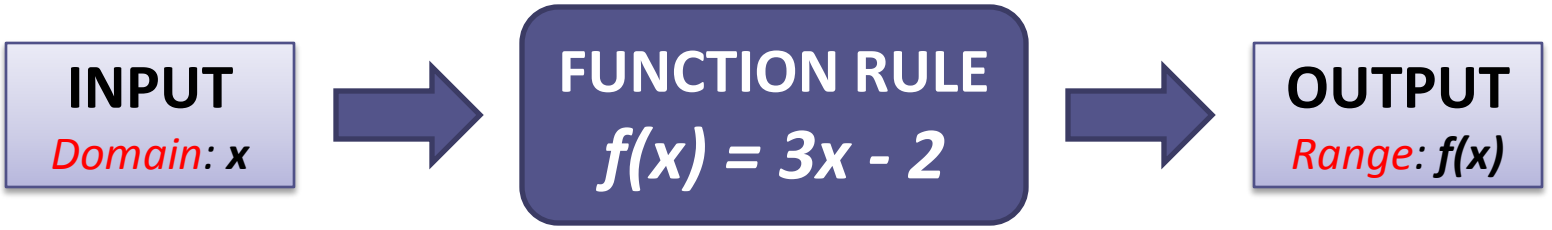
- **FUNCTION:** A RELATION that relates each value in the domain to EXACTLY one value in the range.
  - So What?...The function is **WELL-DEFINED**!

Domain Age (Years)	*Range* Weights (Pounds)
5	45
10	90
20	165
40	165
75	155
40	*125*



Function Rules

- **FUNCTION RULE:** EQUATION that describes a FUNCTION.



{-1, 0, 1, 3, 6} *"Function Notation"* **{-5, -2, 1, 7, 16}**

f is a function of x

{-1, 0, 1, 3, 6} → **$f(x) = x^2 - 4$** **{ _____ }**

{-1, 0, 1, 3, 6} → **$f(x) = -3x$** **{ _____ }**

Math 2 – Daily Summary

- **Announcements**
  - **Quiz on 9.1-4 on Tuesday (2/6)!**
- **Class Objectives – *What you should learn today!***
  - Review Plan for Substitute Days (Thursday & Friday)
  - Area of Triangles, Trapezoids and Kites
- **Assignment**
  - **Lesson 9.2**: 1-16, 22, 23, **25**

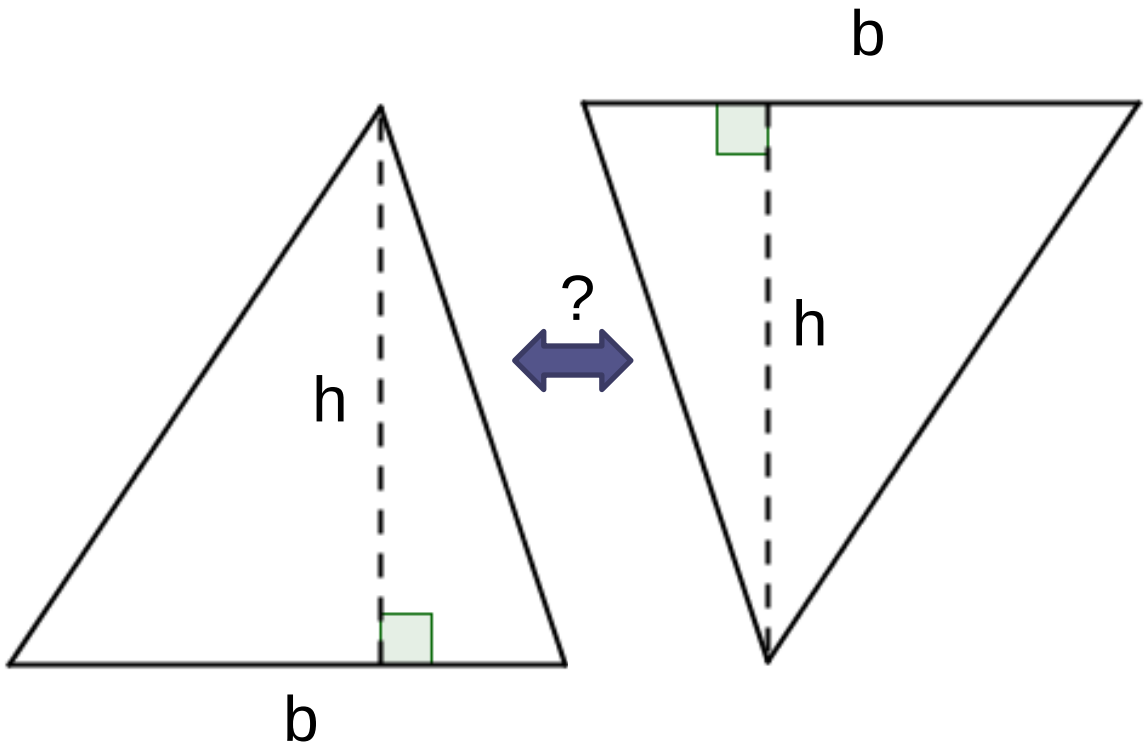
Solving Equations

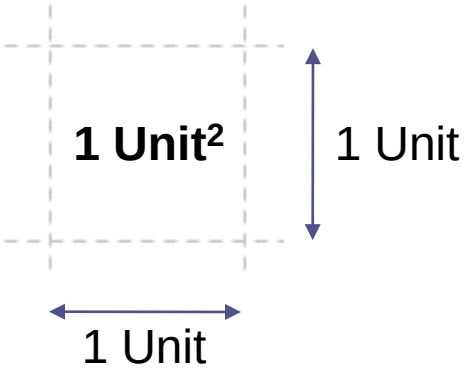
- **Most Missed (26/29 out of 41)…Solve:**

$$\frac{3}{4}x+\frac{2}{3}=\frac{1}{6}x-\frac{1}{4} \qquad |2x-4|=16$$

Area of a Triangle

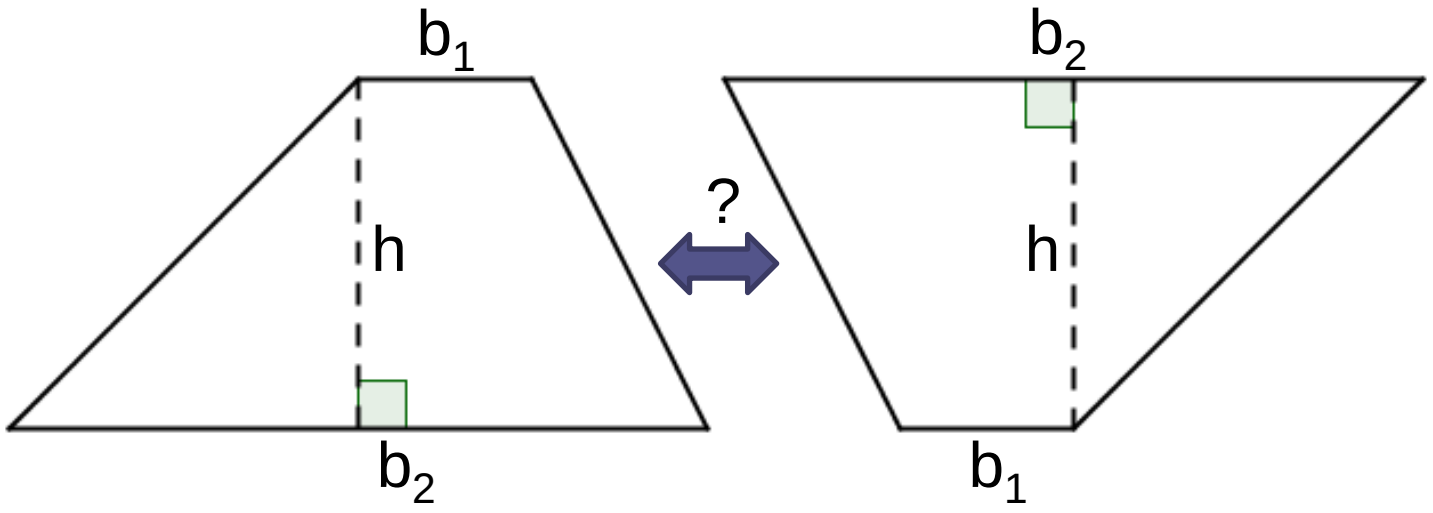
- **Area:**
  - The measure of the region enclosed by the figure.

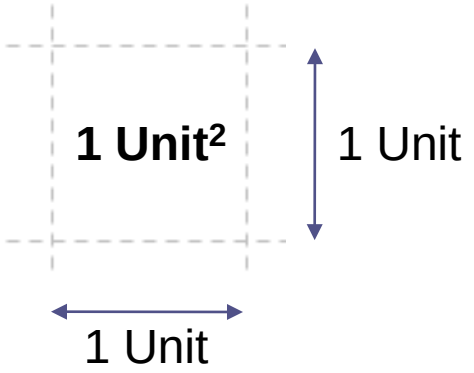




Area of a Trapezoid

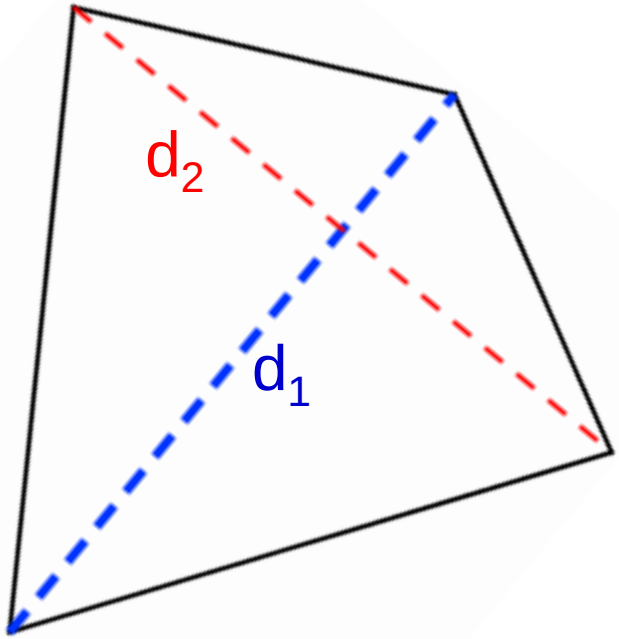
- **Area:**
  - The measure of the region enclosed by the figure.

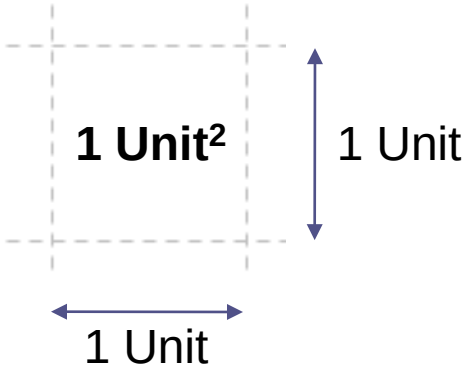




Area of a Kite

- **Area:**
  - The measure of the region enclosed by the figure.





Area Conjectures

- **Area of a Triangle**

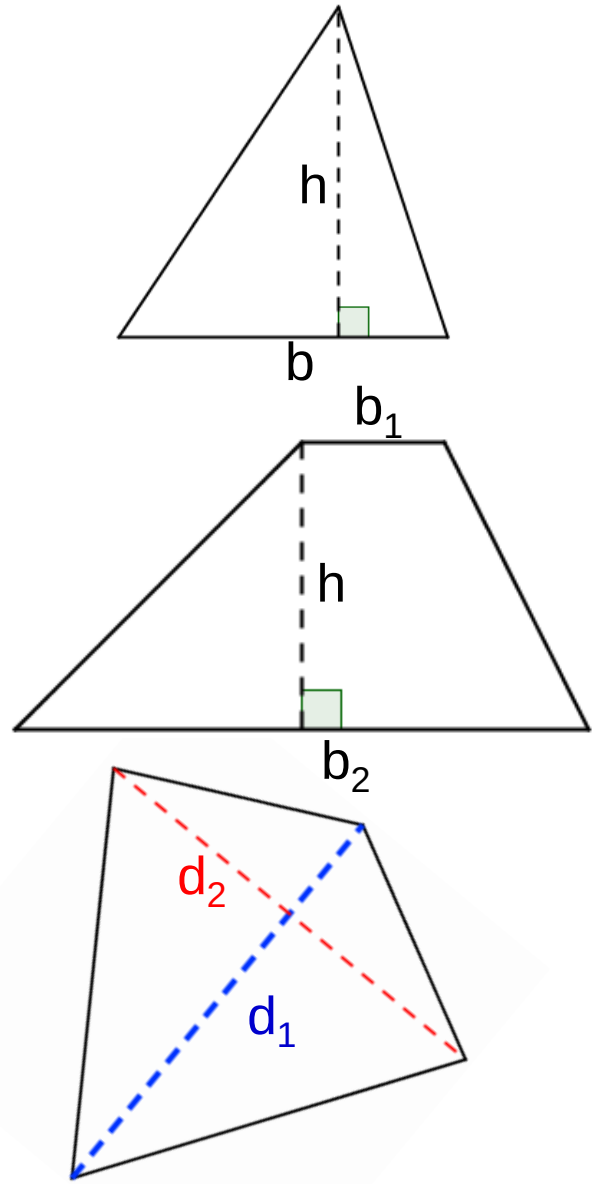
$$A = \frac{1}{2}bh$$

- **Area of a Trapezoid**

$$A = \frac{1}{2}(b_1 + b_2)h$$

- **Area of a Kite**

$$A = \frac{1}{2}d_1 d_2$$



Applied Math – Daily Summary

- **Announcements**
  - **Geometric Art Projects Due on MONDAY!**
- **Class Objectives – *What you should learn today!***
  - Review Plan for Substitute Days (Thursday & Friday)
  - Geometric Art Project
    - Research & Documentation (25%)
    - Artwork (75%)
- **Assignment**
  - Geometric Art Project