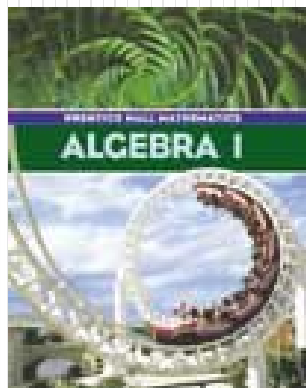
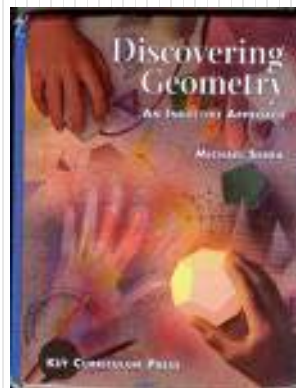


Mr. Northcutt's Math Classes Class Presentation

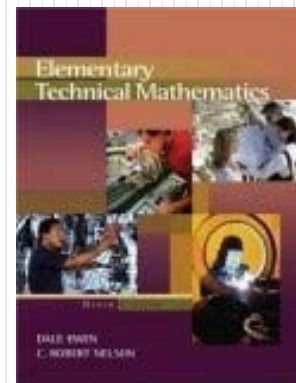
Wednesday, October 29, 2008 (39)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary

- **Announcements**

- 1st Quarter Ends on 11/7

- **Class Objectives**

- Solving Inequalities with Addition & Subtraction

- **Assignment**

- **Lesson 3-2:** 4-36 by 4, 39-41, 45, 51, 61, 66

Solving Inequalities

- In many ways, solving inequalities is exactly like solving equations.

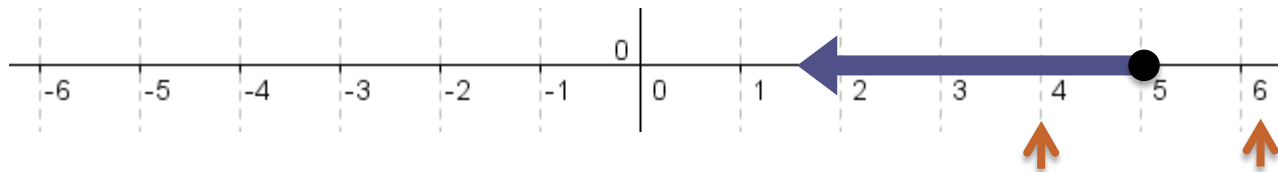
$$n - 7 \leq -2$$

Add 7 to both sides.

$$n - 7 + 7 \leq -2 + 7$$

Simplify.

$$n \leq 5$$



Check: Pick a number on each side of the inequality and substitute.



$$4 - 7 \leq -2$$

$$6 - 7 \leq -2$$

$$-3 \leq -2$$

$$-1 \leq -2$$



Practice

$$n + 3 \geq 8$$

$$\frac{3}{2} + w \leq \frac{1}{3}$$



Check:



Check:

Practice (Variable & Inequality)

- **A school club is selling reflectors for Bicycle Safety Day. Each member is asked to sell at least 50 reflectors. You sell 17 on Monday and 12 on Tuesday. How many reflectors do you need to sell on Wednesday?**

Math 2 – Daily Summary

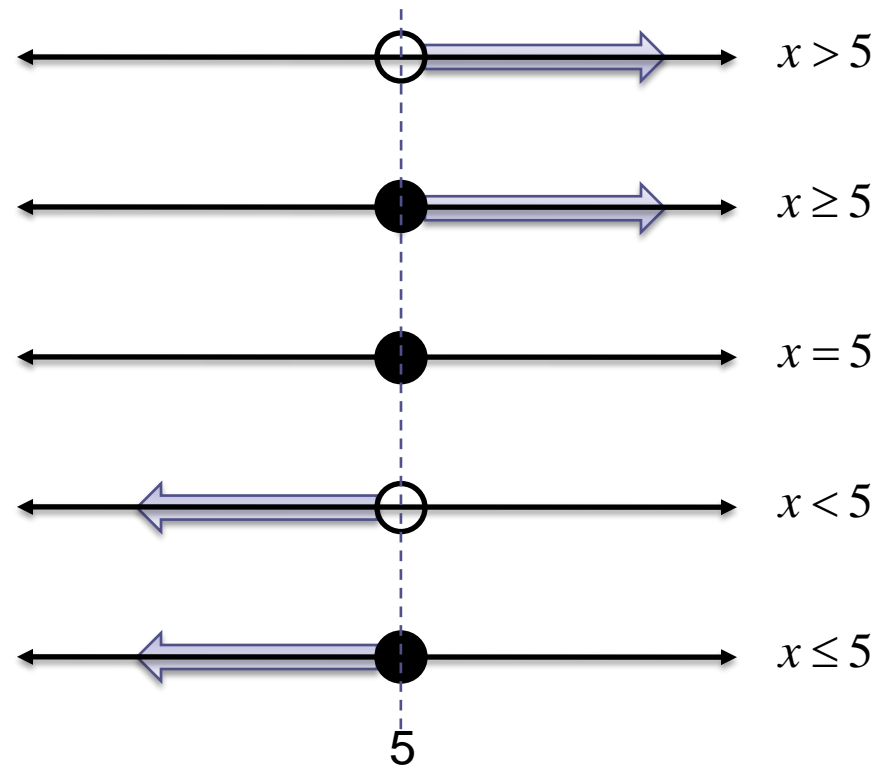
- **Announcements**
 - 1st Quarter Ends on 11/7
- **Class Objectives**
 - Solving Inequalities
 - Graphing Inequalities
- **Assignment**
 - Inequalities Worksheet #1

Inequalities Signs & Graphs

- Inequality Signs

$>$	Greater Than
\geq	Greater Than or Equal To
$=$	Equal To
$<$	Less Than
\leq	Less Than or Equal To

- Graphs



Solving & Graphing Inequalities

- **Exactly the same as solving equations except...**
 - *When you multiply or divide by a **NEGATIVE NUMBER** the direction of the inequality symbol must be reversed!*

$$-6w \leq 12$$

$$0.5x - 2 \geq -4x + 7$$



Check:



Check:

Applied Math – Daily Summary

- **Announcements**

- 1st Quarter Ends on 11/7

- **Class Objectives**

- Changes to HW Approach
- Multiplying Monomials

- **Assignment** (*Separate Paper - Show All Work - Collect*)

- **Lesson 5.4:** 4, 6,14,24,26,29,38,48, 52, 58, 64

Changes to HW/Grading Approach

- **All HW will be corrected and graded in detail.**
- **Expectations**
 - Write the Problem (from textbook)
 - Show all Steps in Solution
- **No Credit will be given where expectations not met.**
- **For 2nd Quarter HW will be raised to 20% of grade.**

Remembering Powers & Exponents

- **Multiplying Monomials can always be reduced to the Definition of a Power.**

$$\begin{array}{c} \text{Exponent} \\ \swarrow \\ x^n \\ \uparrow \\ \text{Base} \end{array} = \underbrace{x \cdot x \cdot \dots \cdot x}_{n \text{ times}}$$

$$3^4 = 3 \cdot 3 \cdot 3 \cdot 3 = 81$$

$$3v^3 = 3 \cdot v \cdot v \cdot v$$

Multiplying Powers

- Consider the following...

$$x^n = \underbrace{x \cdot x \cdot \dots \cdot x}_{n \text{ times}}$$

↑ Base ↖ Exponent

$$(2x^4)(4x^3)$$

$$(x^3)^5$$

$$(-3yx^3)^3$$

Rules for Exponents (General)

- **Multiplying Powers** $x^a \cdot x^b = x^{a+b}$
- **Raising a Power to a Power** $(x^a)^b = x^{a \cdot b}$
- **Raising a Product to a Power** $(xy)^a = x^a y^a$
- **Notation Reminder...** $-x^a = -(x^a)$ $-3^2 = -9$