

Mr. Northcutt's Math Classes Class Presentation

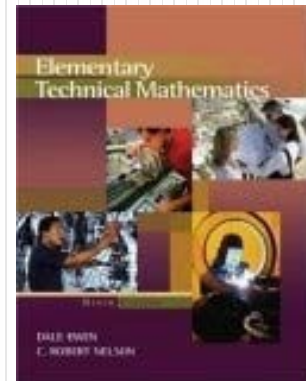
Monday, September 22, 2008 (14)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary

- **Announcements**

- None

- **Class Objectives**

- Quiz Review
- Multiplication & Division of Real Numbers

- **Assignment**

- Lesson 1-6: 4-56 (by 4), 58-79

Quiz Review

- **Results Summary**

- Average = 28 out of 36 = 78%
- Low = 15
- High = 35.25

- **Most Missed Problems**

- 1-4: Defining Variables
- 4: Equation
- 7-9: Order of Operations
- 12: Systems of Numbers

Problems #1-4: Defining Variables

- ★ • **A variable must be defined before it can be used!**

- #1-2: “A Number”
- #3: The total cost of buying apples...if the apples cost \$0.50 each.

- #4:

Number of Workers	# of Skis Made
2	50
4	100
6	150

Problems #7-9: Order of Operations

- **Simplify**

$$\frac{|(-8 + 4) \cdot 3|}{2 - (-4)} \quad 3[4 + 1(-4 - 2)] \quad 2(4) + 2(4 + 2^3) \div (-4)$$

Problem #12: Systems of Numbers

#	Natural	Whole	Integer	Rational	Irrational	Real
-4						
4.5						
$\sqrt{7}$						
$\frac{15}{5}$						

Multiplication & Division

- Multiply/Divide Two Numbers SAME SIGN:

POSITIVE

$$5 \cdot 2 =$$

$$4(3) =$$

$$-3 \cdot (-6) =$$

$$6 \div 2 =$$

$$\frac{12}{2} =$$

$$-16 \div (-4) =$$

- Multiply/Divide Two Numbers OPPOSITE SIGN:

NEGATIVE

$$-5 \cdot 2 =$$

$$4(-3) =$$

$$3 \cdot (-6) =$$

$$-6 \div (2) =$$

$$\frac{12}{-2} =$$

$$-16 \div 4 =$$

Multiply & Divide Fractions

- **Multiply Fractions: “Multiply Straight-Across”**

$$\frac{2}{3} \cdot \left(-\frac{4}{5}\right) =$$

$$-10 \cdot \left(-\frac{4}{5}\right) =$$

- **Divide Fractions: “Multiply by Reciprocal”**

$$\frac{2}{3} \div \left(-\frac{4}{5}\right) =$$

$$-12 \div \left(-1\frac{1}{3}\right) =$$

**What is a
“Reciprocal”?**

Exponential Expressions

- **Be Careful with Exponentials – Order of Operations!!!**

$$-3^4 =$$

$$(-3)^4 =$$

Math 2 – Daily Summary

- **Announcements**

- Quiz Tomorrow (Lessons 2.1 thru 2.4)

- **Class Objectives**

- Line and Angle Relationships
 - Parallel and Perpendicular Lines
 - Complementary, Supplementary and Linear Pair of Angles
- Quick Review: 2.1 thru 2.3

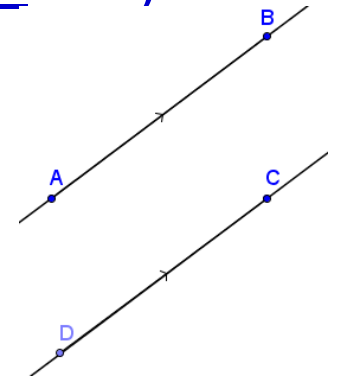
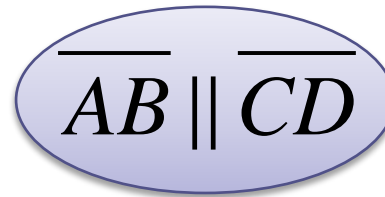
- **Assignment**

- Lesson 2.4: 1-14, 21

Definitions

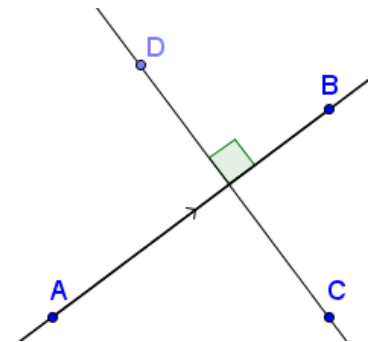
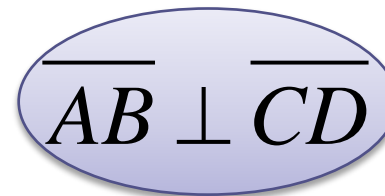
- **Parallel Lines**

- Parallel Lines are Lines that (lie on the Same Plane and) are the Same Distance Apart over their entire length.



- **Perpendicular Lines**

- Perpendicular Lines are Lines that intersect at a 90° angle.



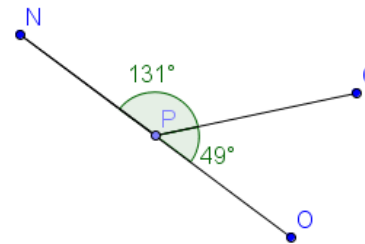
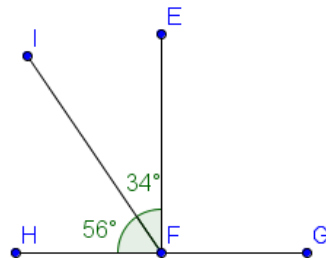
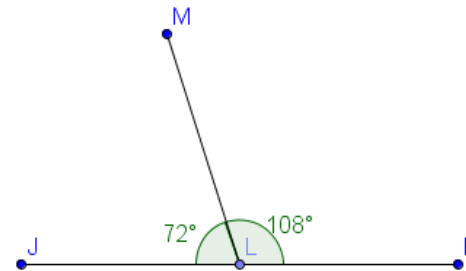
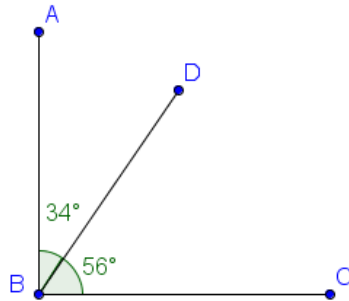
Definitions

- **Pair of Complementary Angles**

- A pair of angles whose measures add to 90° .

- **Pair of Supplementary Angles**

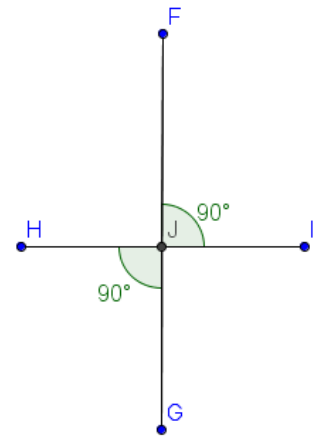
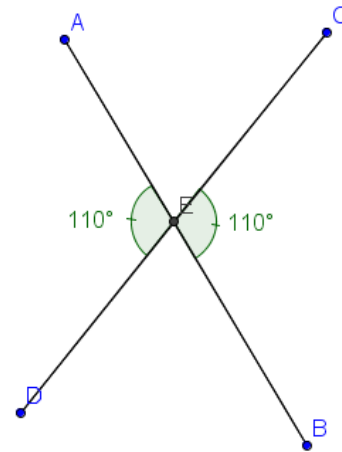
- A pair of angles whose measures add to 180° .



Definitions

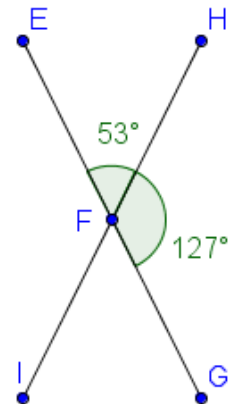
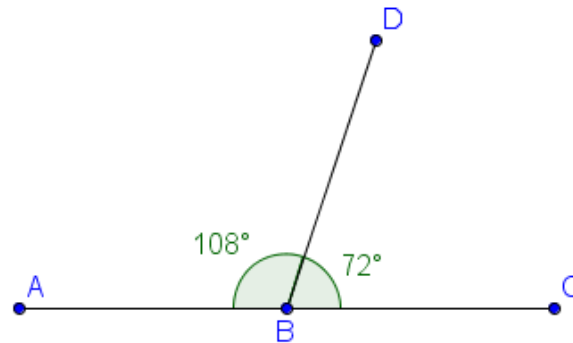
- **Pair of Vertical Angles**

- Two *angles* formed by two *intersecting lines* that lie on opposite *sides* of the *point of intersection (vertex)*.



- **Linear Pair of Angles**

- Two *angles* that share a common *side* & are *supplementary*.



Quiz Review

- **Building Blocks:** _____
- **Collinear Points, Coplanar Points**
- **Space**
- **Line Segment**
- **Endpoints**
- **Ray**
- **Angle, Vertex, Sides**
- **Measure of a Line Segment (Length)**
- **Measure of an Angle (Degrees)**
- **Congruent Segments/Angles**

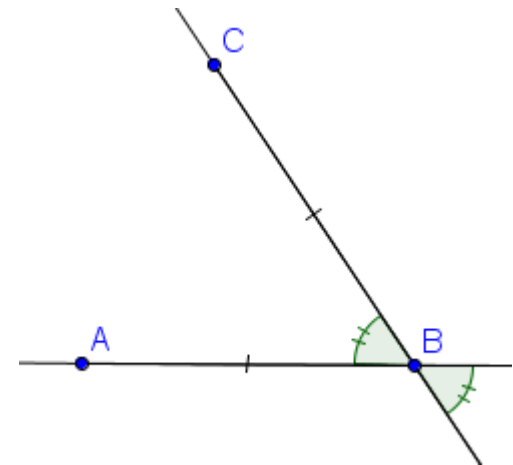
\overline{AB}

\overleftrightarrow{AB}

\overrightarrow{AB}

$\angle ABC, \angle B$

1. Definition
2. Symbolic Form
3. Draw Example
4. Use Markings



Quiz Review

- Attributes of GOOD DEFINITIONS
- Converse – Be able to write it.
- Counterexample
- Right Angle
- Acute Angle
- Obtuse Angle
- Midpoint of a Segment
- Angle Bisector
- Parallel Lines
- Perpendicular Lines
- Pair of Complementary Angles
- Pair of Supplementary Angles
- Pair of Vertical Angles
- Linear Pair of Angles

Applied Math – Daily Summary

- **Announcements**

- Quiz Friday (1.1 thru 1.12)

- **Class Objectives**

- Quiz Review
- Dimensional Analysis (Conversion)

- **Assignment**

- Lesson 1.9: 3, 4, 21, 26, 33, 37, 42, 44, 53, 54, 57

Quiz Review

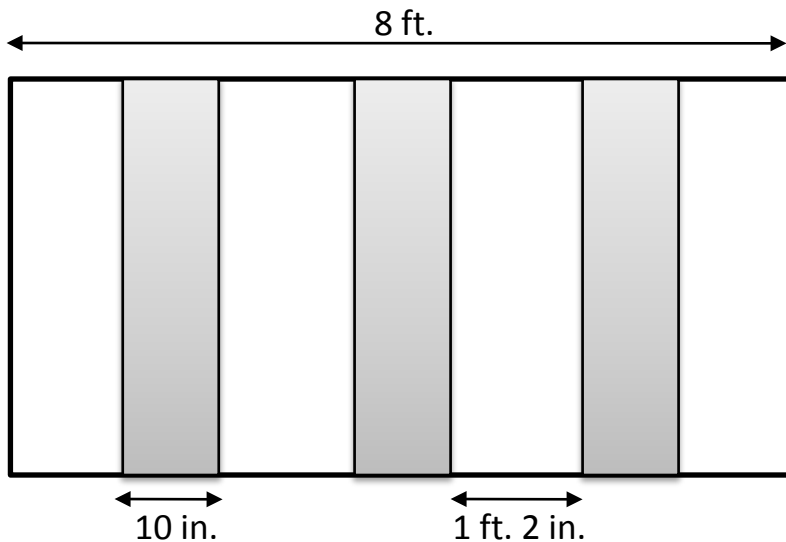
- **Results Summary**

- Average = 28 out of 36 = 78%
- Low = 16
- High = 35

- **Most Missed Problems: #5 and #9**

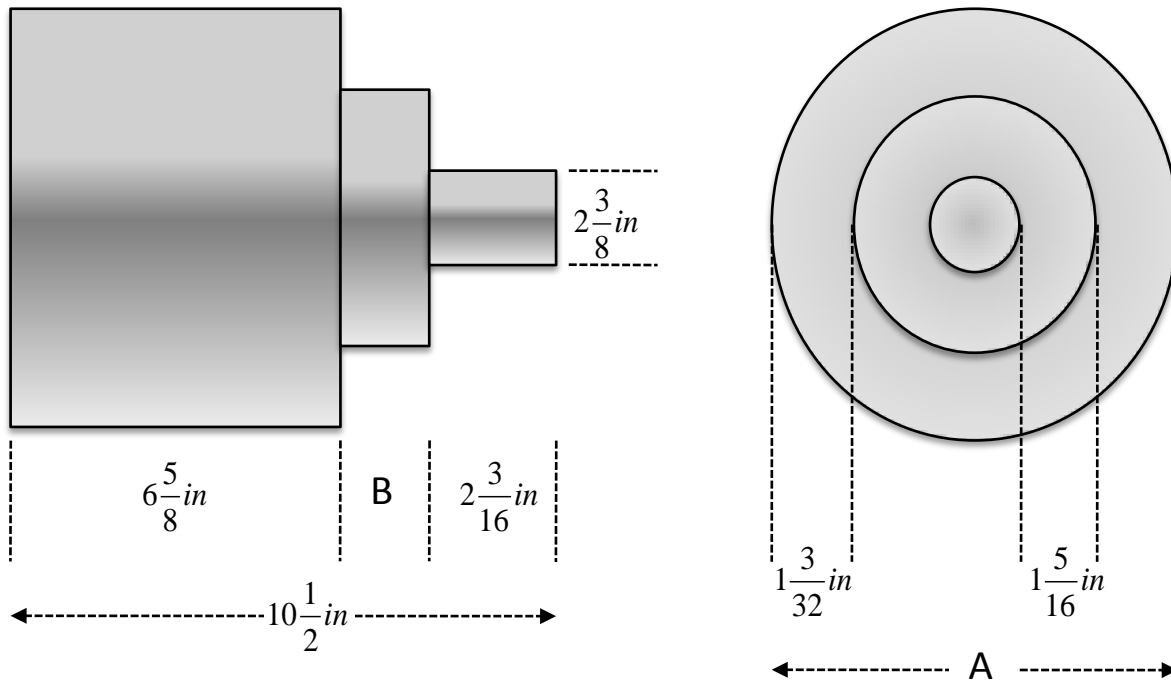
Test Problem #5

- A sheet of plywood (8 ft. long) is painted with three equally spaced stripes to mark off a hazardous area (see below). If each stripe is 10 in. wide, what is the space between the end of the plywood and the first stripe?



Test Problem #9

- An end view and a side view of a shaft are shown. (A) Find the diameter of the largest part of the shaft, and (B) Find the dimension B of the shaft.



US Weights and Measures

- **See Inside Cover of Text**

- 1 lb = 16 oz
- 1 yd = 3 ft = 36 in
- 1 pt = 16 oz
- 1 gal = 4 qt = 8 pt = 128 oz

- **Dimensional Analysis**

1 gal	4 qt	2 pt	16 oz	128 OZ
	1 gal	1 qt	1 pt	

Practice Problem

- Change 24 in/sec to ft/min.

24 in	60 sec	1 ft	1440 FT	120 FT
1 sec	1 min	12 in	12 MIN	MIN