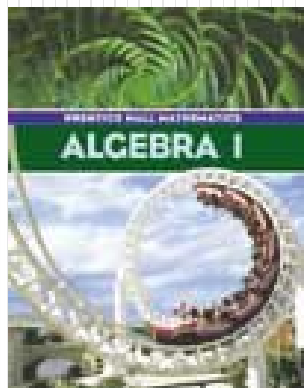
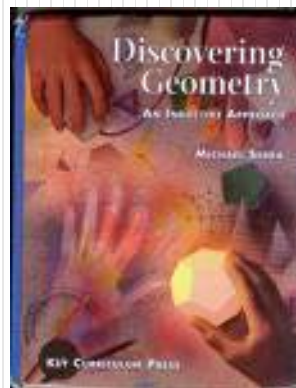


Mr. Northcutt's Math Classes Class Presentation

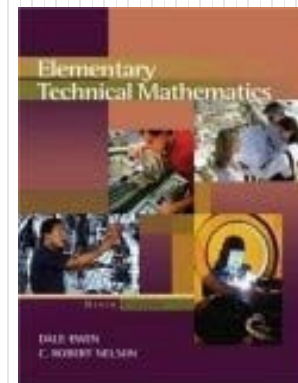
November 12, 2008 (49)



Math 1



Math 2



Applied Math



Math 1 – Daily Summary

- **Announcements**

- **Quiz on Sections 4-1 thru 4-3 Tomorrow**
 - Ratio & Proportion (Equations)
 - Scale & Similar Figures
 - Percentages

- **Class Objectives**

- Using Proportion: More Percentages

- **Assignment**

- **Lesson 4-3: 39-57 ODD**

- **Quiz Review (Highly Recommended)**

- Practice 4-1, 4-2 & 4-3 (Worksheets)

**Pick Problems
that Look Hard!**



HW Solutions: 4-3 (Part #1)

2: 25%

4: 20%

6: 20%

8: 16

10: 28

12: 20

14: 25

16: 240

18: 140

20: 200

22: 64%

24: 15

26: 21

28: 4

30: 0.42

32: ~200

34: 22

36: 68

38: ~960 Students



Example (Word Problem)

- **Suppose you work in an electronics store and earn 6% commission on every item you sell. How much do you earn if you sell a \$545 stereo?**

$$\frac{\%}{100} = \frac{\textit{part}}{\textit{whole}}$$



“Simple” Interest ($I=prt$)

- **Simple interest is NOT compounded.**

I = Interest Paid

p = Principal (amount deposited)

r = Interest Rate (**as a %**)

t = Time invested (known as the period)

$$I = prt$$

- **Use formula to find the missing value:**

- $I = \underline{\hspace{1cm}}$, $p = \$340$, $r = 6\%$, $t = 3 \text{ yr.}$



Math 2 – Daily Summary

- **Announcements**

- Chapter 5 Test, Thursday, November 20th

- **Class Objectives**

- Quiz Summary
- Triangle Congruence Conjectures:
 - Angle-Side-Angle (**ASA**)
 - Side-Angle-Angle (**SAA**)
 - Angle-Angle-Angle (**AAA**)

- **Assignment**

- **Lesson 5.5: 1-15, 23**



Quiz Summary & Review

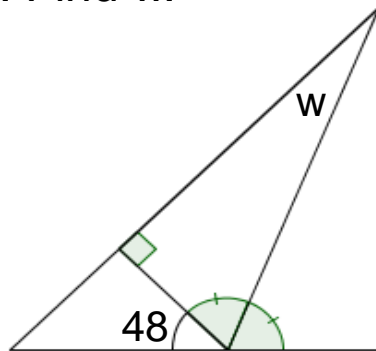
- **Scoring Summary** (out of 17 points)
 - Average = 11.9 (**70%**)
 - High = 17 (**100%**)
 - Low = 4 (**24%**)
- **Areas for Development**
 - T/F Problems...need work!
 - Systems of Equations and Slope of Lines
 - Triangle Conjectures – Applying Them

Quiz – Problems 6, 7 & 8

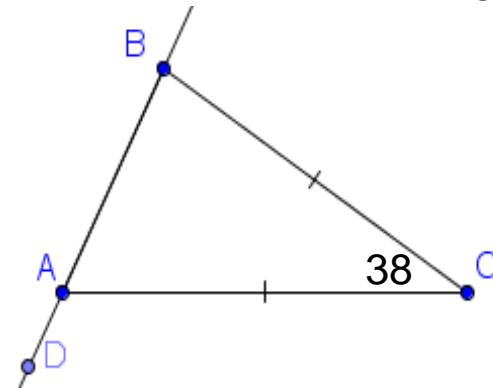
Which Conjecture(s)
Used?



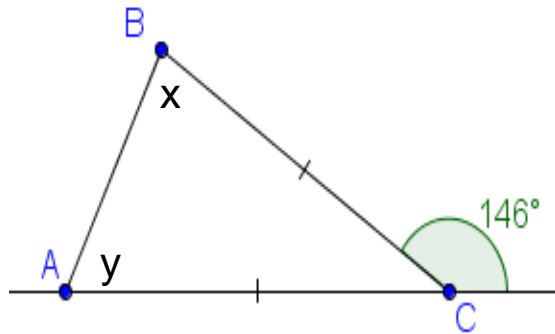
6. Find w .



7. Find the measure of angle CAD.



8. Find $x+y$.





Quiz - Problems 9 & 10

9. Find the point of intersection of the two lines:

$$y = 3x - 1$$

$$y = 2x + 1$$

10. Determine whether quadrilateral ABCD is a rectangle, parallelogram, trapezoid, or none of these. A(-3,1), B(3,5), C(5,2), D(-1,-2).



Minimum Number of Measures?

- It is easy to show that 2 measures are NOT enough.
 - Identify some counterexamples...
- There are 6 combinations of 3 measures to look at:
 - Side-Side-Side (**SSS**)
 - Side-Side-Angle (**SSA**)
 - Side-Angle-Side (**SAS**)
 - Angle-Side-Angle (**ASA**)
 - Side-Angle-Angle (**SAA**)
 - Angle-Angle-Angle (**AAA**)

Look at
these today!

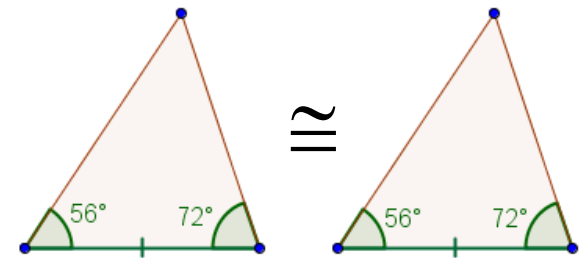
[Go to Geogebra →](#)

Triangle Congruence Conjectures



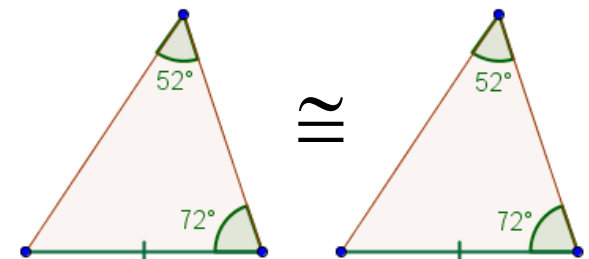
- **Angle-Side-Angle (ASA)**

- If two angles and the side between them in one triangle are congruent to two angles and the side between them in another triangle, then the triangles are congruent.



- **Side-Angle-Angle (SAA)**

- If two angles and a side that is not between them in one triangle are congruent to the corresponding two angles and a side not between them in another triangle, then the triangles are congruent.



Summary of Triangle Congruence



- **These Work!**

- Side-Side-Side (SSS)
- Side-Angle-Side (SAS)
- Angle-Side-Angle (ASA)
- Angle-Angle-Side (AAS)

- **These DON'T Work**

- Side-Side-Angle (SSA)
- Angle-Angle-Angle (AAA)



Applied Math – Daily Summary

- **Announcements**

- Quiz on Sections 6.1 thru 6.6 (Equations) TOMORROW!
- Chapter 6 Test Next Thursday

- **Class Objectives**

- Applications of Equations (cont.)

- **Assignment**

- Lesson 6.6: 14-24 EVEN

- **Quiz Review (Highly Recommended)**

- Chapter 6 Review (pg. 254)
- Chapter 6 Test (pg. 254)

**Pick Problems
that Look Hard!**



Quiz Tomorrow (6.1-6.6)

- **The following material will be on the Quiz:**
 - Solving Equations
 - Integer, Fractional & Decimal Coefficients
 - Using Distributive Property
 - Combining Like Terms
 - Applications of Equations (Word Problems)

1st Test/Quiz Grade of 2nd Quarter
Try to get off to a strong start!



Steps for Problem Solving

- **You might find the following process useful:**
 1. Read the problem carefully (at least twice)
 2. Draw a diagram to help visualize the problem.
 3. Define a Variable(s) for the unknown quantity(s).
 4. Write an Equation(s) to express relationships in the problem using the variable(s).
 5. Solve the equation for the variable(s).
 6. Check your answer – in the equation and using common sense.



Example (Many Applications)

- **How much pure alcohol must be added to 200 cm³ of a solution that is 15% alcohol to make a solution that is 40% alcohol?**
 - Show 2 solution approaches:
 - Definition of Percentage (using Proportions) for Start & End.
 - Start + Added = End
- **Applications:**
 - Medicine, Food Services, Agriculture, Construction...



HW Solutions 6.6 #2

14: \$39, \$54, \$117

16: Amy = 13hr, Kim = 17hr

18: \$8000 @ 7.5%
\$4000 @ 9%

20: 375 ml

22: $\frac{4}{5}$ L of acid solution,
 $3\frac{1}{5}$ L of water

24: 800 L of 90%
400 L of 75%