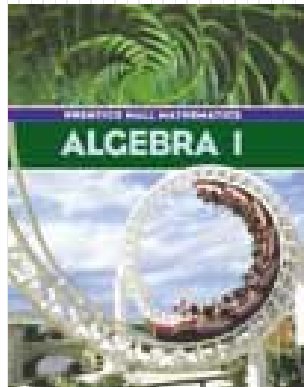




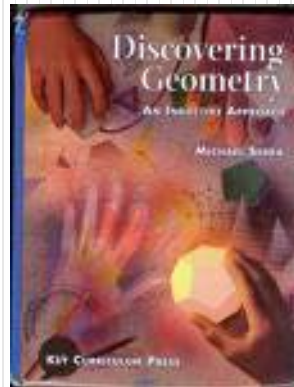
Mr. Northcutt's Math Classes Class Presentation



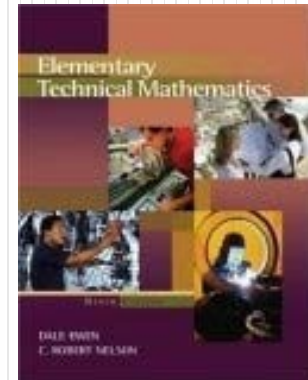
December 2, 2008 (60)



Math 1



Math 2



Applied Math



Math 1 – Daily Summary

- **Announcements**
 - **QUIZ: Sections 8-1 thru 8-3 on Friday**
- **Class Objectives**
 - Scientific Notation
 - Recognizing, Ordering and Multiplying
- **Assignment**
 - **Lesson 8-2: 2-32 EVEN, 42-43, 46**



See a Problem?

- These types of numbers come up all the time in science and engineering...as well as global finance.

2,365,000,000,000

0.000000546

-0.000000000000123

- The really big and really small...



Scientific Notation

- There is a shorthand for writing very large/small numbers...Scientific Notation = Using Exponents

$$= 2,365,000,000,000$$

$$= 2.365 \times 1,000,000,000,000$$

$$= 2.365 \times 10^{12}$$



Scientific Notation - Definition

- The product of two factors in the form:

$$a \times 10^n$$

where n is an integer and $1 \leq a < 10$

- Which numbers are written in Scientific Notation?

$$2.3 \times 10^4$$

$$-34 \times 10^{-3}$$

$$6.34 \times 10^{2.5}$$



Writing in Scientific Notation

- You can write a number in Scientific Notation by moving decimal place left (large numbers)/right (small numbers) using an exponent.

$$\begin{aligned} & \text{5 places to left} \\ & = 267,000.0 \\ & = 2.67 \times 10^5 \end{aligned}$$

$$\begin{aligned} & \text{5 places to right} \\ & = 0.0000325 \\ & = 3.25 \times 10^{-5} \end{aligned}$$

35,600,000



The Other Way...and Ordering

- Write the following numbers in Standard Notation

$$5.07 \times 10^4$$

$$8.3 \times 10^{-2}$$

- Can you order from smallest to largest

$$0.052 \times 10^7, 5.12 \times 10^5, 53.2 \times 10, 534$$



Multiplying a Number in SN

- **An example...**

$$7(4 \times 10^5) = 7 \cdot 4 \times 10^5 = 28 \times 10^5$$

- **Do you see a problem?**

$$0.4(2 \times 10^{-9})$$



Math 2 – Daily Summary

- **Announcements**

- **RETEST: Chapter 5 + Polynomials on Friday (Last Chance!)**
 - I am available for help before and after school!

- **Class Objectives**

- Test Review
- Multiply/Divide Polynomials

- **Assignment**

- **Worksheet:** Multiplying & Dividing Polynomials
- **Sample Test** (Due Thursday)

Some Advice...

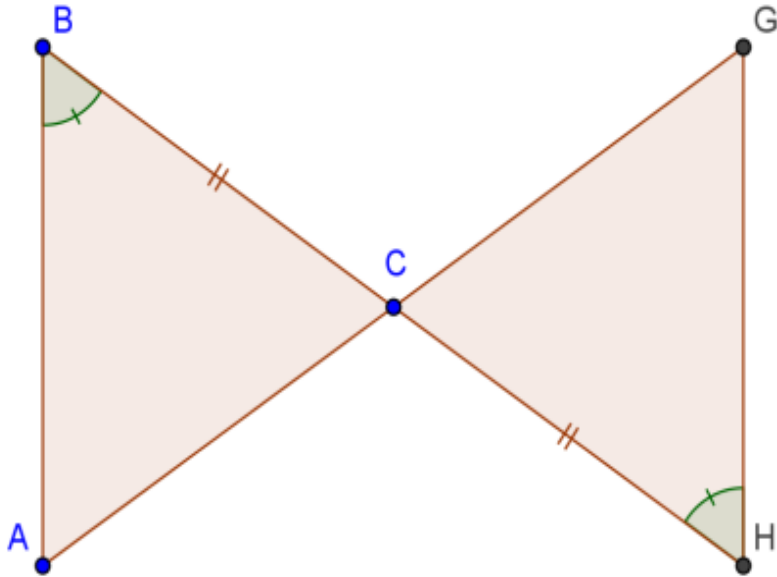


You need to have a **GOOD**
REASON for anything you
do!



STOP Guessing...**Ask**
Questions

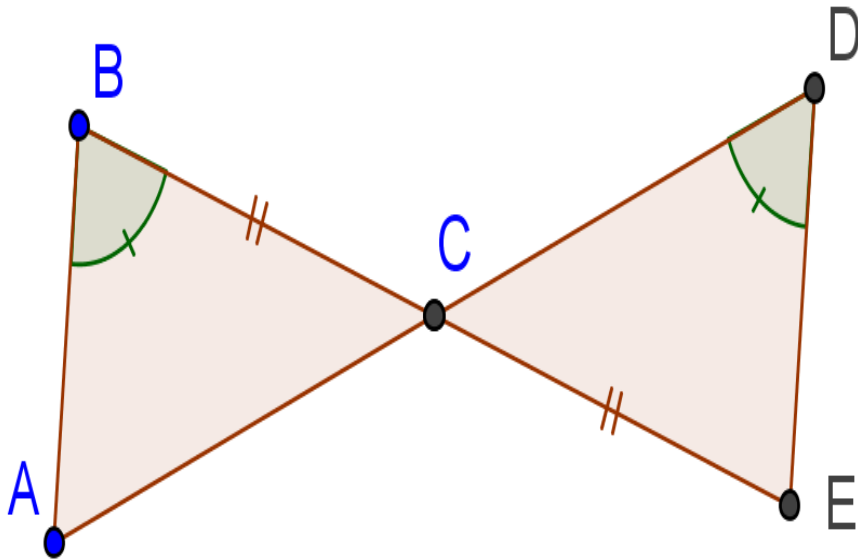
Problem #13



$$\triangle ABC \cong \triangle \underline{\hspace{2cm}}$$

Conjecture =

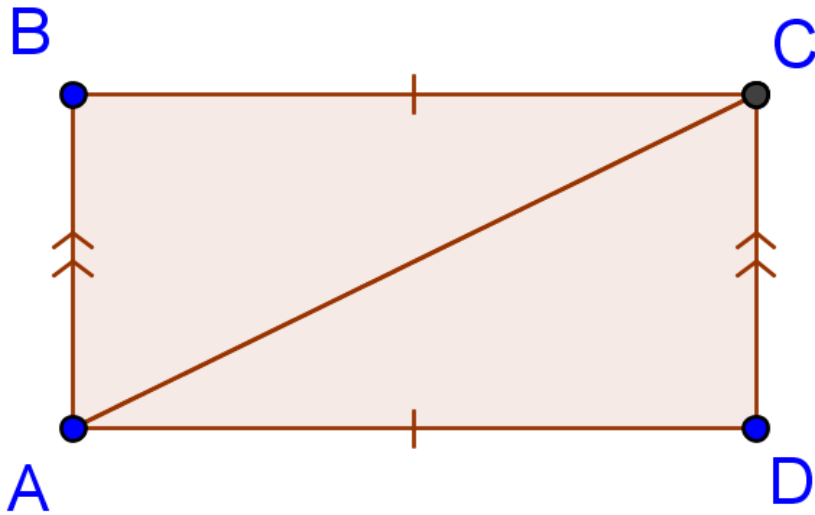
Problem #14



$$\triangle ABC \cong \triangle \underline{\hspace{2cm}}$$

Conjecture =

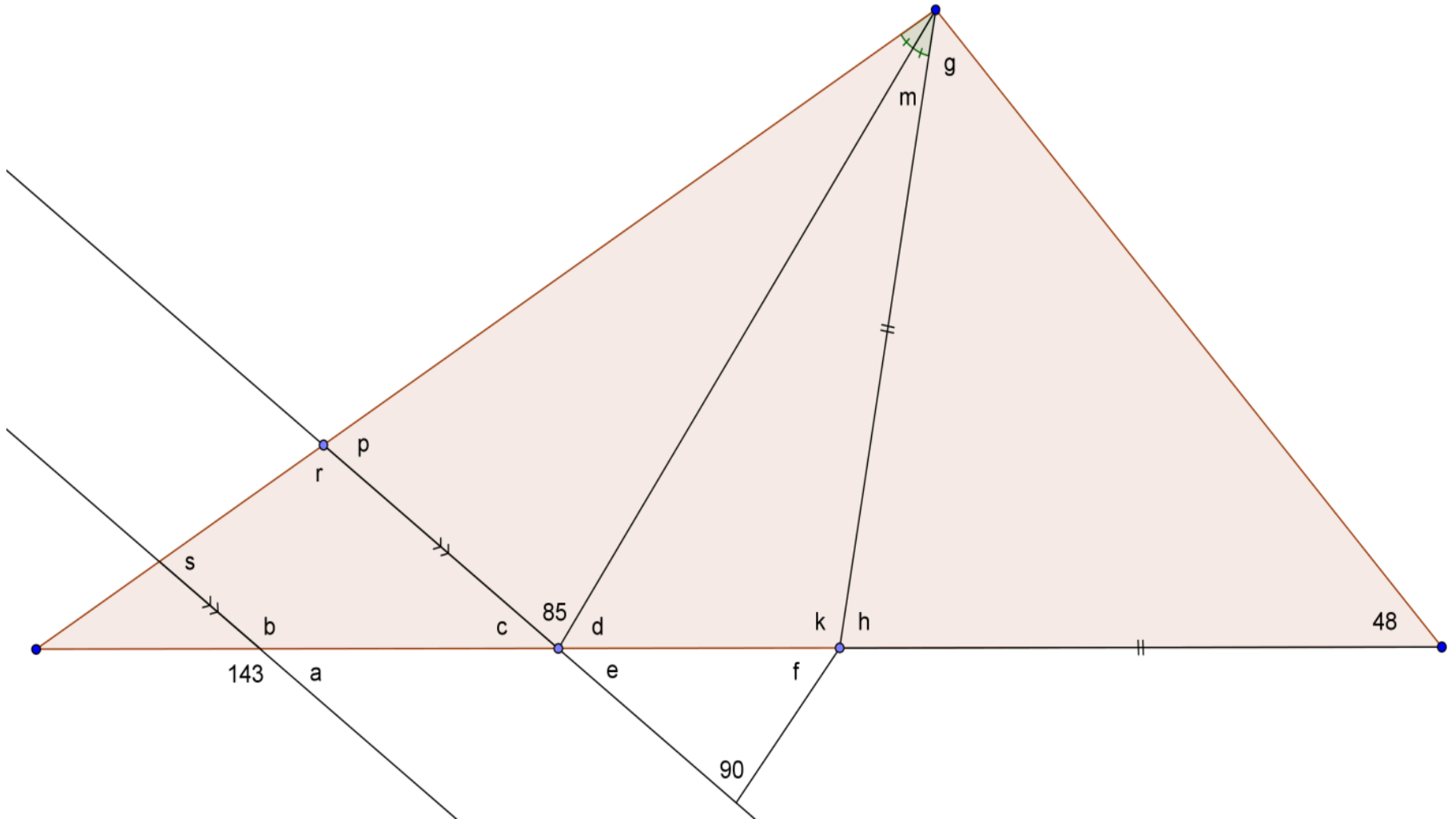
Problem #15



$$\triangle ABC \cong \triangle \underline{\hspace{2cm}}$$

Conjecture =

Problem #16

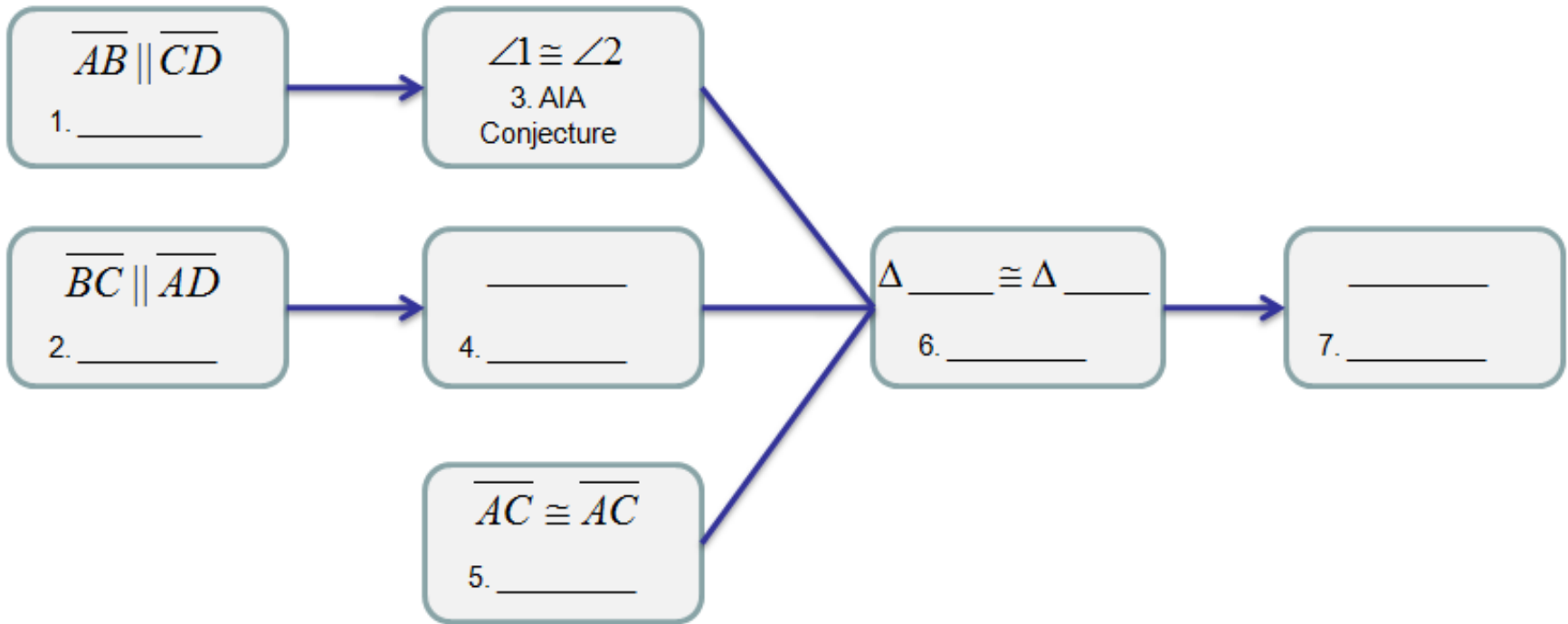
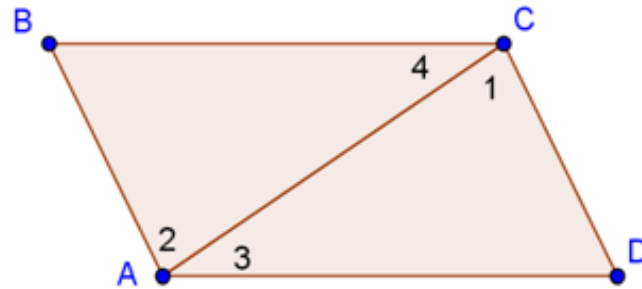




Problem #17

Given: $\overline{AD} \parallel \overline{BC}$
 $\overline{AB} \parallel \overline{CD}$

Show: $\overline{AB} \cong \overline{CD}$



Applied Math – Daily Summary



- **Announcements**

- Bridge Building Project This Week
 - **Project Write-up & Competition on Friday!**

- **Class Objectives**

- Continue Bridge Construction

- **Assignment**

- Bridge Work



Bridge Building Teams

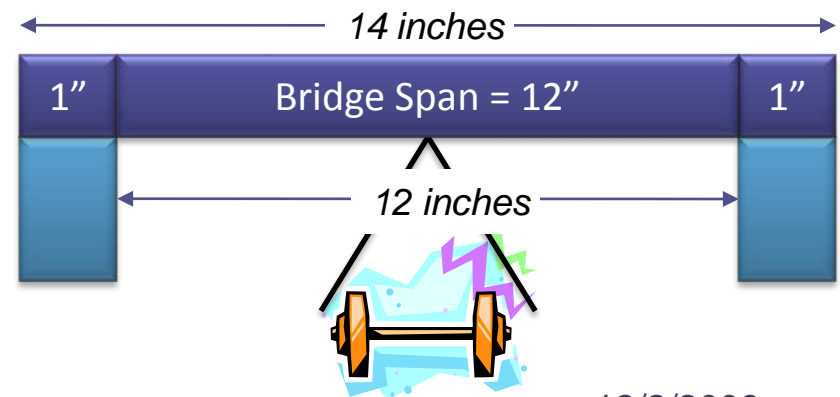
1. **Tucker & Connor**
2. **Ellie & Cecilly**
3. **Kyle & Mitchell**
4. **Sam & Augusta**
5. **Matt & Danielle**
6. **Justin & Mike**



Bridge Guidelines

- **Minimum Requirements**

- Only use popsicle sticks and glue
- Minimum of a 12 inch span. Must include at least 1 inch on either end to support the bridge.
- Minimum of 1 inch width.
- Maximum of 100 popsicle sticks
- No cutting or breaking of popsicle sticks
- Weight will be hung from the CENTER OF THE BRIDGE ON DECK (where car would be).





Project Scoring Rubric

- **Documented Design (20%)**
 - Sketch of Bridge – What are your plans?
 - Rationale for Design – Why are you using the design?
 - Confirmation of Materials – Do you have enough?
- **Quality of Construction (30%)**
 - Assessment by teacher and peers
- **Use of Time During Class (30%)**
 - Assessment by teacher
- **Results (Efficiency) (20%)**
 - Results of Weight Test

$$\text{Efficiency} = \frac{\text{Total Load (kg)}}{\text{Bridge Weight (kg)}}$$