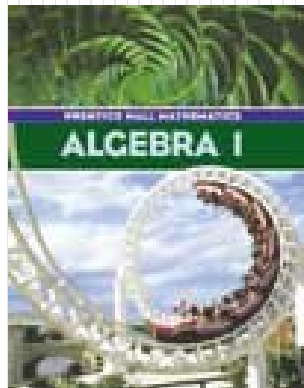


# Mr. Northcutt's Math Classes Class Presentation

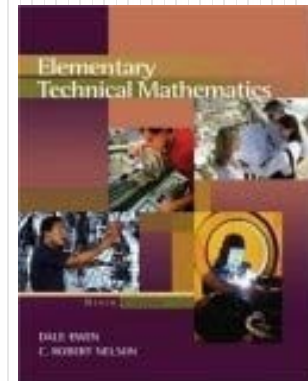
September 4, 2008 – Day 3



Math 1



Math 2



Applied Math

# Math 1 – Daily Summary

- **Announcements**

- You need website access today...get it ASAP!
- Math 1 Schedule on Website is Updated

- **Class Objectives**

- Complete Initial Proficiency Check
  - If complete, work on “[Plus & Minus](#)” Game (Mental Math)
  - NO Multiplication, Max Number = 12
  - **Goal is 10 Correct with NO ERRORS** (record your time in Notebook)
- Textbook Assignment
- Introduce Variables (time permitting)

- **Assignment**

- None

# Math 2 – Daily Summary

- **Announcements**

- You need website access today...get it ASAP!

- **Class Objectives**

- Review Proficiency Results
- Assign & Review Textbooks
- Inductive Reasoning, (Deductive Reasoning) & Counterexamples

- **Assignment**

- Website: Plus & Minus (10 Correct, No Errors, w/ Mult.)
  - Record your time in your Notebook!
- **Lesson 1.1: 1-9 (ODD)**

# Proficiency Results

- **46 People Total**
- **38 Problems Total**
- **Statistics:**
  - Maximum = 34
  - Minimum = 3
  - Average = 15.5 (<50%)
- **Areas Checked:**
  - Order of Operations
  - Solving Equations
  - Graphing & Linear Equations
  - Polynomials & Factoring
  - Simultaneous Equations

## CONCLUSIONS

- Wide range of skills
- Need to focus in all areas

*Strong*



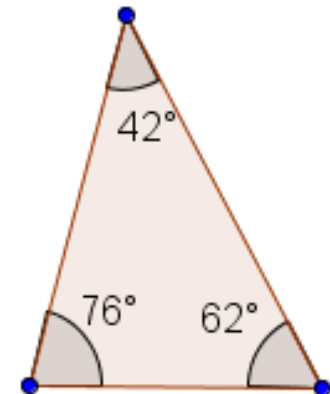
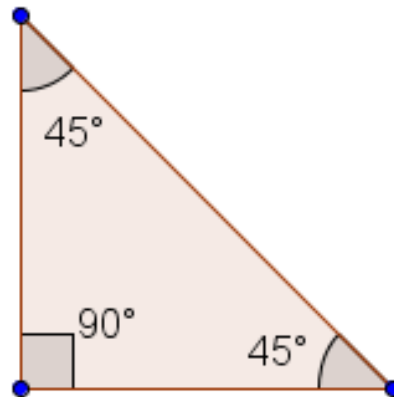
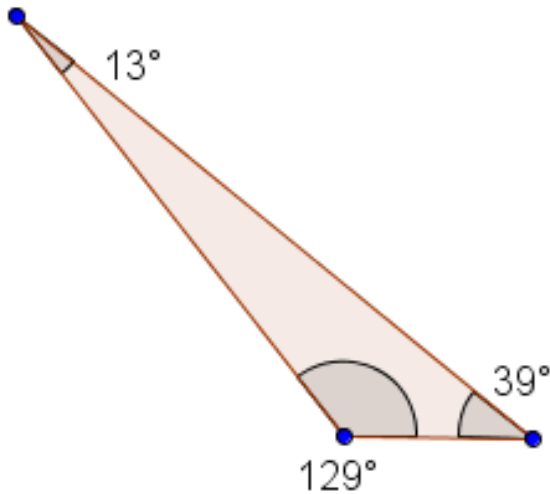
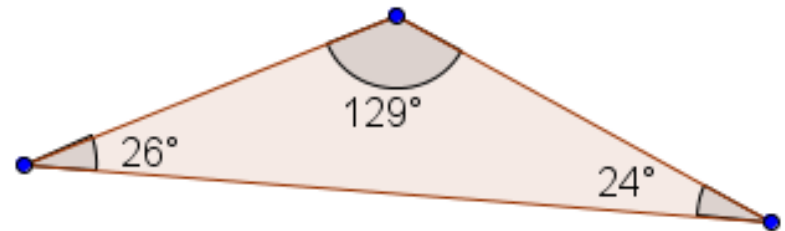
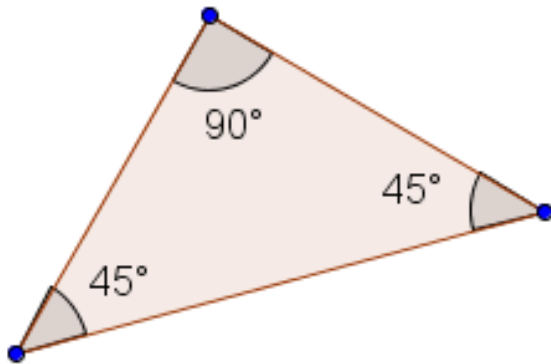
*Weakest*

# Reasoning, Conjecture & Counterexample

- **Inductive Reasoning (Trial & Error – What You Do!!!)**
  - The process of observing data, recognizing patterns, and making generalizations.
  - Examples:
    - Burning Salt, Naked in the Snow...
  - In Mathematics, we call the generalization a **Conjecture**
    - Properties of triangles...next slide.
- **Deductive Reasoning (Formal Proof)**
  - Inductive reasoning is NOT a proof!
- **Counterexample**
  - A case that proves the conjecture wrong.
    - All objects fall to the ground when released.

# Example of Inductive Reasoning

- **What Conjecture can you make about triangles?**



# Applied Math – Daily Summary

- **Announcements**

- You need website access today...get it if you haven't already!

- **Class Objectives**

- Review Proficiency Results
- Review Technology & Future Survey
- Assign & Review Textbooks
- Review Operations with Whole Numbers

- **Assignment**

- Website: [Plus & Minus](#) (10 Correct, No Errors, w/ Mult.)
  - Record your time in your Notebook!
- **Exercises 1.1:** Pick any 6 in 13-68 (based on interest)
  - Try to challenge yourself a little...use example in book for help.

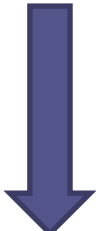
# Proficiency Results

- **13 People Total**
- **38 Problems Total**
- **Statistics:**
  - Maximum = 32
  - Minimum = 8
  - Average = 19.5 (~50%)
- **Areas Checked:**
  - Order of Operations
  - Solving Equations
  - Graphing & Linear Equations
  - Polynomials & Factoring
  - Simultaneous Equations

## CONCLUSIONS

- Wide range of skills
- Need to focus in all areas

*Strong*



*Weakest*



# Technology & Future Survey

## Technology

- Internet Access
  - 3 No Access
  - 2 “kinda”
  - 8 Have Access
- Excel Skills Low-to-Med
- 4 Web Page Developers

## The Future

- Culinary Arts (2)
- Military (3)
- Banking (1)
- College (1-2?)
- Drafting/Design (2)
- Diesel/Mechanic (2)
- Missionary (1)
- Computers (1)
- Construction (1)
- Working (1)

# Why Taking Class

- Sharpen Math Skills
- Everyday Math Skills
- Geometry Skills
- Don't Know...but Like Math
- Understand Math Better
- Review Past Math
- Trigonometry
- Pass with an A or B
- Have Fun!

# Other Stuff

- **Textbook Review**

- Structure
- Application Areas (see icon on problems)

- **“Plus & Minus” – Mental Math Practice**

- **Operations with Whole Numbers**

- Addition (Sum)
  - Subtraction (Difference)
- } *Inverses*

- Multiplication (Product)
  - Division (Quotient, Dividend, Divisor, Remainder)
- } *Inverses*

$$\begin{array}{l} 84 \div 6 \\ 115 \div 7 \end{array}$$

$$\begin{array}{l} 16 \text{ r } 3 \\ 16\frac{3}{7} \end{array}$$