FRIDAY, AUGUST 24, 2012

- TISK Problems

1. Factor completely: $8x + x^2 + 12$

2. Simplify: $\frac{3x^2 + 2x}{x}$

3. Find the GCF of $7x^2$ and $14x^3$.

We will have 3 Mental Math Questions today.

Homework: p89-90 Complete #14-33 mentally, complete 34-36 in writing
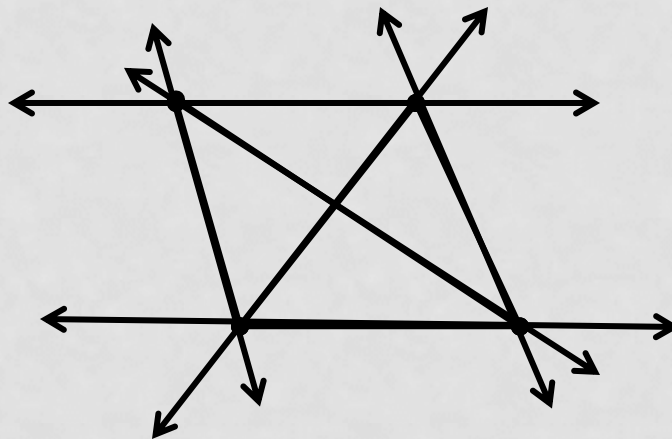
Optional: p. 91 #1-10

HOMEWORK CHECK

- Please pass in your write-ups then check your answers to the homework from Wednesday night: p. 81-82 #42-50 even

42) True

44) False

46) One

48) Six

50) One

§2-3 DEDUCTIVE REASONING

- Deductive Reasoning
  - Reasoning that flows from a general statement to more specific and logical conclusions.
  - The majority of Geometry is done with deductive reasoning.
- Two main Laws of reasoning for deduction:
  - Law of Detachment
    - If $p \Rightarrow q$ is a true conditional statement **and** p is true, then q is true.
  - Law of Syllogism
    - If $p \Rightarrow q$ and $q \Rightarrow r$ are true conditional statements, then $p \Rightarrow r$ is also true.

EXAMPLES

- Law of Detachment
  - If a vehicle is a car, then it has four wheels.
    - A sedan is a car.
    - What valid conclusion can you make?
  - If two numbers are odd, then their sum is even.
    - 3 and 5 are odd numbers.
    - What valid conclusion can you make?
  - If I watch TV, I will not do my homework.
    - I did my homework.
    - Can you conclude that I did not watch TV?

EXAMPLES

- Law of Syllogism
  - If Elena takes the car to the store, she will stop at the post office.
    - If Elena stops at the post office, she will buy stamps.
    - What valid conditional statement could you write?

PARTNER ACTIVITY

- Work with your seat partner to complete the worksheet after viewing the video.
- Skip 1a and 1d.