Tuesday, August 7, 2012

TISK Problems

1. Find the midpoint of the segment with the endpoints *A*(5, 8) and *B*(-62, 24).
2. Factor the expression: $5x^2 + 25x + 30$

Have your paper ready for 3 Mental Math questions today.

Homework Check

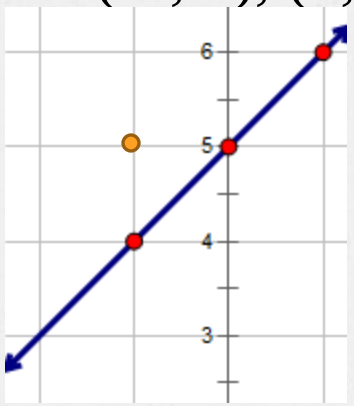
26) (-5, 4)

28) (3, 0)

30) (0, -2)

32) Sample Answer:

(-1, 4), (0, 5), (1, 6)

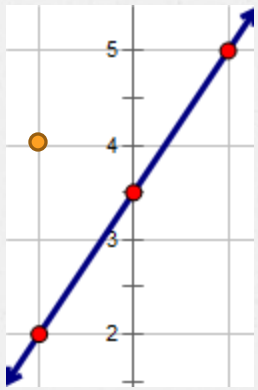


(-1, 5)

34) Sample Answer:

(-1, 2), (0, 3.5), (1, 5)

(-1, 4)

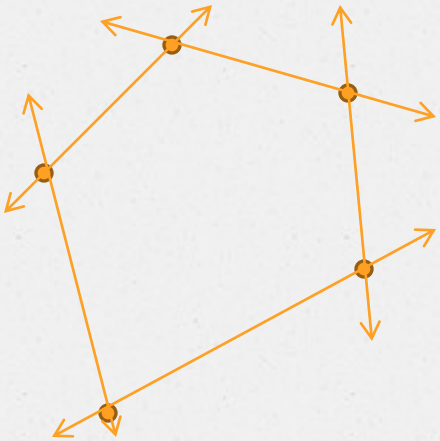


(36 & 37 on next slide)

Homework Check

36) Sample answer:

Draw a pentagon and use its sides as intersecting lines. The vertices would form a set of 5 points that are noncollinear.



37) Sample answer:

Since $y = 3x + 5$ and $y = -2x - 10$, let $3x + 5 = -2x - 10$. Once you solve for x, you get $x = -3$. Therefore, $y = -4$. The ordered pair (-3, -4) is then the intersection of the two lines since it is the only point they have in common.

Today's Lesson Goals

- Identify points, lines, and planes.
- Learn to name points, lines, and planes using the proper notation.
- Define coplanar.

Points, Lines, and Planes

- Define
  - Point
  - Line
  - Plane
  - Space
- Kind of difficult?

Let’s take a look at the way points and lines intersect in space…

Notation, notation, notation!

- There are a few proper ways to **name a line**.
- This line is called line *RS*.

- We can write this line using the notation:
- $\overleftrightarrow{RS}$ or $\overleftrightarrow{SR}$

Why do you think the order of the letters doesn't matter?

Notation, notation, notation!

- Here is a representation of plane *M*:

- If we add points to the plane, we must add at least three to give it a different name.
- Now we can call this plane *ABC*, *BCD*, *CDA*, etc.
- Do you think the order of the letters matters when you name a plane?

Coplanar

- What does it mean to be “coplanar”?

Homework

- p. 17 #52-55 & 57