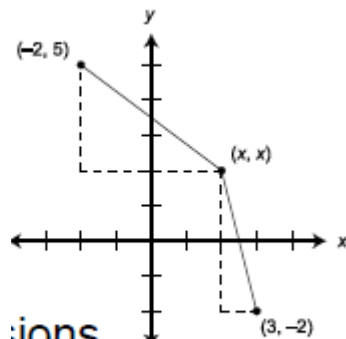**8th Grade Homework #1A**

Due Date: February 02, 2014

1.

The sum of the digits of a two-digit
positive integer is 9. The difference
between this integer and a two-digit
integer containing the digits reversed is
27. We must find the product of the two
digits.

2.

. The point (x, x) is equidistant from

(-2,5) and (3,2). What is x?

3.

In one roll of four standard six-sided
dice, what is the probability of rolling
exactly three different numbers?

4.

Triangle MNO is an isosceles triangle with MN = NO = 25. A line segment drawn from the midpoint of MO perpendicular to MN, intersects MN at point P with NP:PM = 4:1. We must find the length of the altitude drawn from point N to side MO.