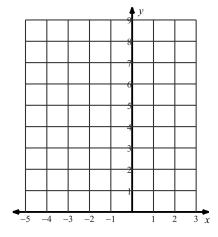
HW 9.7

Date_____ Algebra____

Sketch the graph of each function.

1)
$$f(x) = x^2 + 2x + 5$$



2) Fill in the blanks for the parabola in number one:

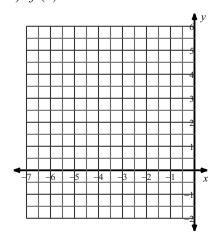
when x=3,
$$f(x) =$$

when x = -2, $f(x) =$ ____
when x = -3, $f(x) =$ ____

when
$$f(x) = 5$$
, $x =$ ______
when $f(x) = 4$, $x =$ _____
when $f(x) = 20$, $x =$ _____
when $f(x) = 2$, $x =$ _____

Sketch the graph of each function.

3)
$$f(x) = -x^2 - 8x - 12$$



4) Fill in the following for the parabola in number three:

Vertex:____

AOS:_____

ROOTS:_____

Find the VERTEX, AOS and ROOTS ALGEBRAICALLY!!!!

5)
$$y = 2x^2 - 12x + 14$$

Solve each equation by factoring.

6)
$$-4r^2 + 17r + 42 = 4r - 5r^2$$

Solve each equation by completing the square.

7)
$$x^2 + 12x = 28$$

Solve each equation with the quadratic formula. Round your answers to the thousandths.

8)
$$x^2 - 12x = -9$$