Assignment 22

Name: _____
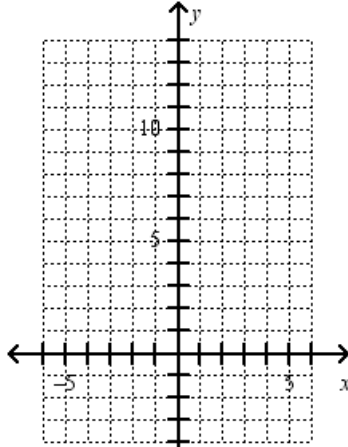
Section 1 –Mixed Graphing Practice

Graph each quadratic, put 2 graphs on each coordinate grids.
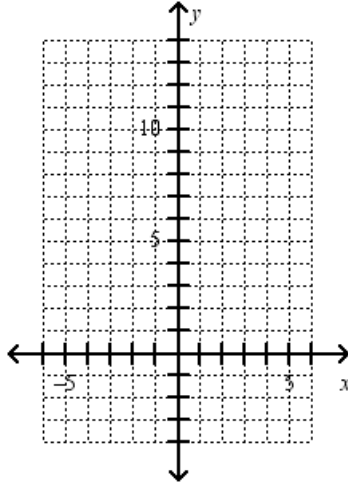
1.

a) $y = (x+4)^2 + 3$
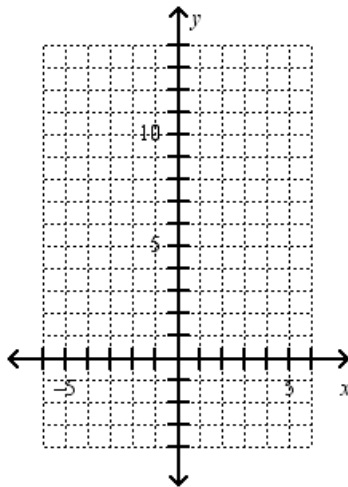
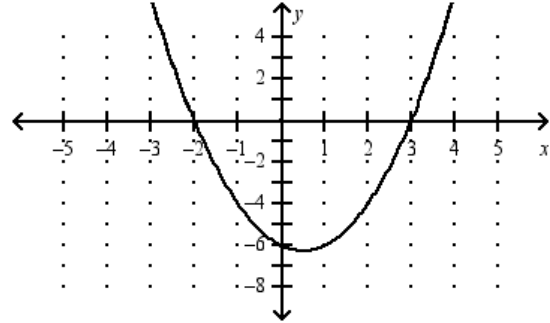b) $y = x^2 - 3$

2.

a) $y = x^2 - 6x + 5$

b) $y = x^2 - 2x$

3.

a) $y = (x-1)^2 + 3$

b) $y = x^2 - 4x + 4$

Section 2 – Finding Zeros

1. Use the graph to find the zeros of the function.
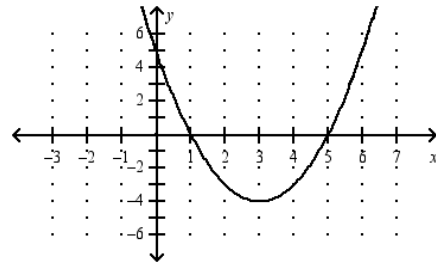

In problems 2-5 find the zeros of each function.

2. $f(x) = x^2 - 4x - 21$

3. $y = x^2 - 12x + 36$

4. $f(x) = x^2 + 14x + 40$

5. Solve the equation $x^2 - 6x + 5 = 0$ by using the graph

Section 3 – Finding Axis of Symmetry

Find the axis of symmetry for each function.

1. $y = x^2 + 6x - 3$

2. $y = -x^2 - 10x - 4$

3. $y = 2x^2 - 8x + 5$

2. Solve $3x^2 - 7x + 1 = 0$ by using the Quadratic Formula.

3.
Find the zeros of the function $h(x) = x^2 + 23x + 60$
by factoring.

Section 4 – Finding the Vertex

Find the vertex for each function. List as an (x,y) ordered pair.

1. $y = 2x^2 - 8x - 6$

2. $y = -x^2 - 12x + 3$

3. $y = 3x^2 - 12x$

4. Solve the equation: $x^2 - 10x + 25 = 6$

5. Solve: $\sqrt{5 - 4x} = x$. Check your answers.

6. Solve: $-6 + \sqrt{x - 5} = -2$

Section 5 – Final Equations

1. Solve: $x^2 - 12 = 0$