

SM3 HW #2-3 (Intercept Form)

Date _____ Period _____

For problems 1-8:

- a) Convert the equation to intercept form by factoring.
- b) What are the x-intercepts?
- c) Find the vertex using the method I taught in the notes.
- d) Write the vertex form equation.

1) $y = x^2 - 6x + 8$

2) $y = x^2 - 14x + 40$

3) $y = x^2 + 10x + 16$

4) $y = x^2 + 4x - 32$

5) $y = 2x^2 - 12x + 18$

6) $y = -3x^2 + 6x + 5$

$$7) \ y = x^2 + 10x + 21$$

$$8) \ y = x^2 - 6x - 16$$

$$9) \ y = 3x^2 + 7x - 6$$

- a) Convert to intercept form by factoring
- b) List the x-intercepts

$$10) \ y = 6x^2 - 7x - 5$$

- a) Convert to intercept form by factoring
- b) List the x-intercepts

$$11) \ y = 5x^2 - 12x + 7$$

- a) Convert to intercept form by factoring
- b) List the x-intercepts

$$12) \ y = -8x^2 - 24x + 14$$

- a) Convert to intercept form by factoring
- b) List the x-intercepts