

**SM2-A HW #7-7 (Review Quadratics)****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