

Q3 - Homework 6

Date _____ Period _____

a.) Graph each quadratic function. b.) Find each discriminant and state how many roots the quadratic equation has and describe the roots (rational, irrational, double, etc.). c.) If the quadratic equation can be factored, solve it. d.) Show all work, T-Tables, etc. Work that is not neat will be marked wrong.

1) $y = x^2 - 8x + 15$

2) $y = x^2 - 8x + 20$

3) $y = x^2 + 4x + 3$

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

5) $y = x^2 + 4x + 6$

6) $y = -2x^2 - 16x - 36$

7) $y = 2x^2 + 12x + 15$

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

9) $y = x^2 + 8x + 12$

10) $y = -x^2 - 4x - 3$