Name: _____

Quadratic Equations

1) Solve using completing the square:

1) $2x^2 - 7x + 3 = 0$

2) $a^2 - 14a + 19 = 0$

3) $n^2 + 16n - 7 = 0$

4) $a^2 + a - 5 = 0$

5) $v^2 + 18 = 9v$

6) $3x^2 - 5x + 2 = 0$

7) $2a^2 + 8a - 3 = 0$

8) $2a^2 - 5a - 6 = 0$

9) $p^2 + 8p + 10 = 0$

10) $q^2 - 9q + 11 = 0$

11) $3a^2 + a - 2 = 0$

12) $c^2 + 6c + 8 = 0$

13) $2a^2 - 10a + 5 = 0$

2) Determine whether or not the quadratic equation can have real roots. If yes determine the roots.

1) $x^2 - 5x + 3 = 0$

2) $x^2 - 7x + 10 = 0$

3) $x^2 + 6x - 16 = 0$

4) $x^2 + 6x + 4 = 0$

5) $9 - x^2 = 0$

6) $7x - x^2 = 0$

7) $2x^2 - 7x - 4 = 0$

8) $6x^2 - x - 1 = 0$

9) $2x^2 + 2x + 5 = 0$

10) $5x^2 - 4x + 1 = 0$

3) Identify a, b, and c for $ax^2 + bx + c = 0$

1) $2x^2 + 9x + 3 = 0$

2) $-3x^2 + x + 5 = 0$

3) $x^2 - x - 6 = 0$

4) $8x^2 + 20x = 9$

5) $4x - 5 - 3x^2 = 0$

6) $\frac{1}{3}x^2 + \frac{1}{6}x - \frac{1}{8} = 0$

7) $80x^2 - 16x - 32 = 0$

8) $0.1x^2 - 0.11x - 1 = 0$

9) $18x^2 + 39x + 20 = 0$