## 8.1 Solving Quadratic Equations (Finding the roots)

**Roots of an Equation:** _____

_____

Standard Form of a Quadratic Trinomial → $ax^2 + bx + c = 0$

Difference of Squares → $x^2 – y^2 = 0$

Quadratic Equations can be solved by FACTORING.
RULES:

1)

2)

3)

Solve each equation.

**1.** $z^2 - 5z + 4 = 0$

**2.** $r^2 - 12r + 35 = 0$

**3.** $m^2 + 10m + 9 = 0$

**4.** $x^2 + x - 6 = 0$

**5.** $x^2 - 49 = 0$

**6.** $m^2 - 64 = 0$

**7.** Write an equation in the form $ax^2 + bx + c = 0$ such that the roots, or solution set is as follows.

a. {-2, 7}

b. {8, -8}