

Sec 5-5

Solving quadratic equations by factoring:

- Write eq in Standard Form:

$$ax^2 + bx + c = 0$$

- Factor
- Find the zeros of each factor

Solve each by factoring.

1. $x^2 + 6x = 16$

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

$$(x+8)(x-2)=0$$

$$x = -8, 2$$

2. $8a^2 - 20a = 0$

$$4a(2a - 5) = 0$$

$$a = 0, 5/2$$

3. $2w^2 = 7w - 5$

$$2w^2 - 7w + 5 = 0$$

$$(2w - 5)(w - 1) = 0$$

$$w = 5/2, 1$$

4. $2w^2 + 11 = 60 - 7w^2$

$$9w^2 - 49 = 0$$

$$(3w \pm 7) = 0$$

$$w = \pm 7/3$$