

Warm Up: Solve each. Each uses a different method of factoring, #5 use quad formula

1.  $x^2 + 2x - 8 = 0$

$(x+4)(x-2) = 0$

$x = -4$  and  $x = 2$

3.  $x^2 - 64 = 0$

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

$x = 8$ , and  $x = -8$

2.  $5x^2 + 2x - 7 = 0$

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

$x(5x + 7) - 1(5x + 7) = 0$

$(5x + 7)(x - 1) = 0$

$x = -7/5$  and  $x = 1$

4.  $x^2 + 49 = 0$

$(x - 7i)(x + 7i) = 0$

$x = 7i$ , and  $x = -7i$

5.  $-8x^2 + 4x + 5$

$x = [-4 \pm \sqrt{(16 + 160)}] / -16$

$x = 0.25 - 0.829$  and  $x = 0.25 + 0.829$

$x = -.579$  and  $x = 1.079$

