

Warm-up 3/29/17

Factor each expression.

1. $-x^2 - 49x$

$$-x(x + 49)$$

2. $x^2 - 6x - 72$

$$(x + 6)(x - 12)$$

P =	S =
-72	-6
1, -72	-71
2, -36	-34
3, -24	-21
4, -18	-14
6, -12	-6

$4x = 0$

$x = 0$

$zy = 0$

$z = 0$

$y = 0$

Pg. 984

$$x^2 - 4x - 5$$

$$(x+1)(x-5)$$

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

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

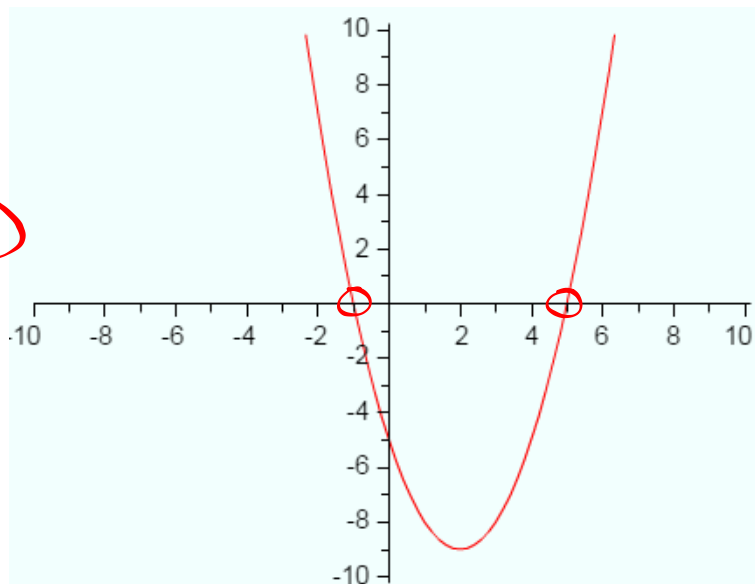
$$x+1=0 \quad x-5=0$$

$$x=-1 \quad x=5$$

Pg. 985

$$y = x^2 - 4x - 5$$

$$y = (x+1)(x-5)$$



Pg. 986

3

$$x^2 - 8x + 12 = 0$$

$$(x-2)(x-6) = 0$$

$$x-2=0 \quad x-6=0$$

$$x=2 \quad x=6$$

P =	S =
12	-8
-1, -12	-13
-2, -6	-8

4

$$x^2 - 5x - 24 = 0$$

$$(x+3)(x-8) = 0$$

$$x+3=0 \quad x-8=0$$

$$x=-3 \quad x=8$$

P =	S =
-24	-5
1, -24	-23
1, -24	
2, -12	-10
3, -8	-5

$$(x+15)(x-5) = 0$$

$$x+15=0 \quad x-5=0$$

$$x=-15 \quad x=5$$

$$x(x-11) = 0$$

$$x=0 \quad x-11=0$$

$$x=11$$