Warm-up 3/6/17

Use the distributive property to simplify each function.

1. $f(x) = -x(x+10)$ $= -x^2 - 10x$

2. $f(x) = -8x(11-x)$ $= -88x + 8x^2 = 8x^2 - 88x$

3. $f(x) = -6(x-4)$ $= -6x + 24$

4. $f(x) = 7(x+1)$ $= 7x + 7$

Pg. 886-887

1-5

$10x + 100$

$10(x+10)$

$50 - x$

$-x + 50$

$-1x + (-1)(-50)$

$-(x-50)$

$10(x+10) \cdot -(x-50)$

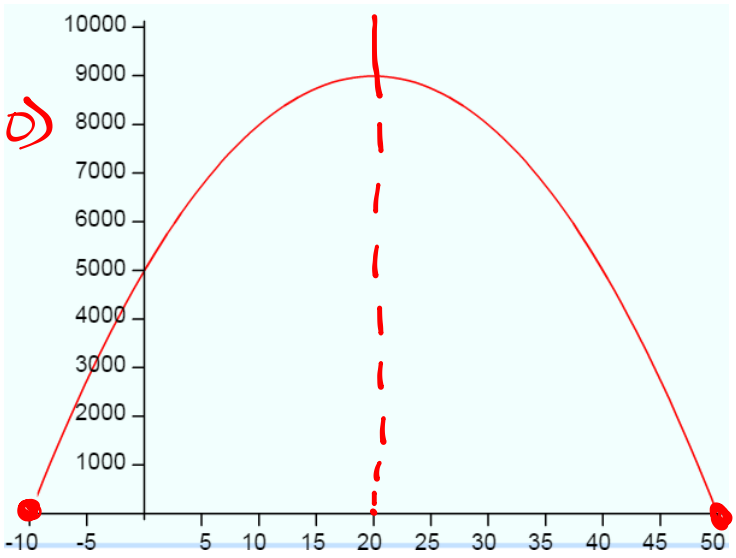
$-10(x+10)(x-50)$

Pg. 888
6-8

x-int. (-10,0) (50,0)

y-int. (0,5000)

max (20,9000)

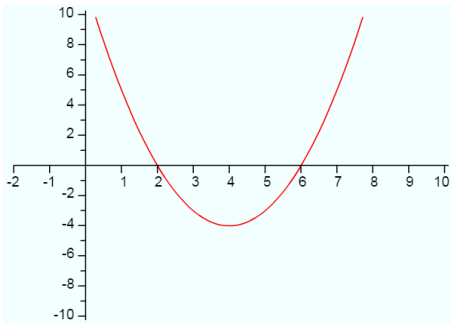


$-10(x+10)(x-50)$

Pg. 889-890
1-3

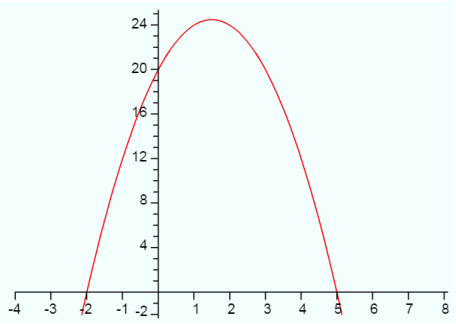
$a(x-2)(x-4)$

Pg. 891
5



$h(x) = x^2 - 8x + 12$ $= (x-2)(x-6)$

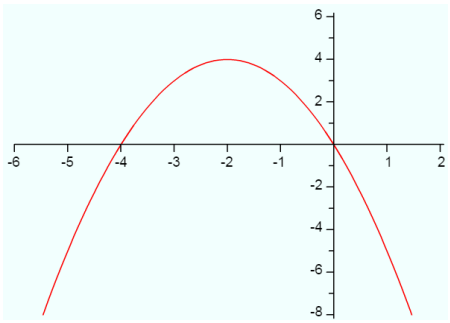
(2,0) (6,0)



$r(x) = -2x^2 + 6x + 20$ $= -2(x+2)(x-5)$

(-2,0) (5,0)

Pg. 891
5

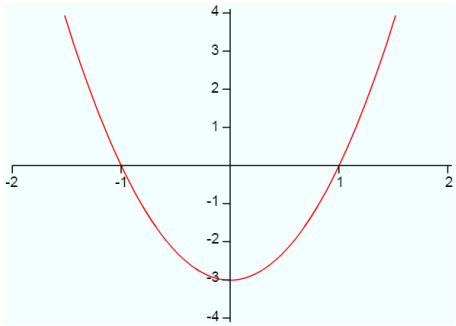


$w(x) = -x^2 - 4x$ $= -(x+4)(x-0)$

(-4,0)

(0,0)

$= -x(x+4)$



$c(x) = 3x^2 - 3$ $= 3(x+1)(x-1)$

(-1,0)

(1,0)

Pg. 892
6.

a. (2, 0)
(7, 0)

b. (0, 0)
(-3, 0)
$x(2x+6)$
$2(x-0)(x+3)$

c. (-1, 0)
(5, 0)
$(x+1)(5-x)$
$(x+1)(-x+5)$
$-(x+1)(x-5)$

d. (-4, 0)
(-3, 0)
$(-9-3x)(x+4)$
$-3(x+3)(x+4)$