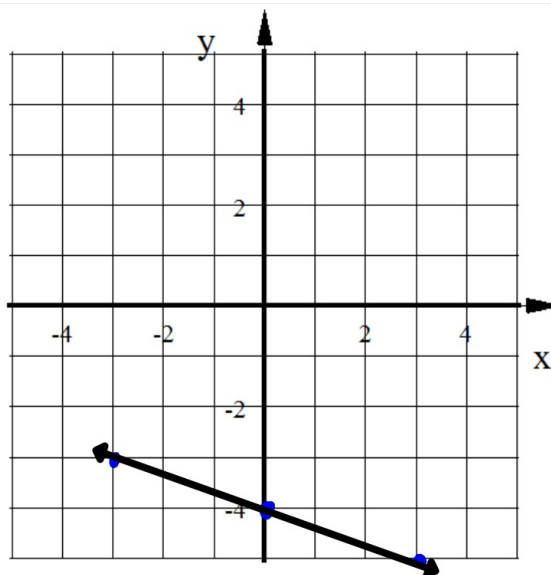
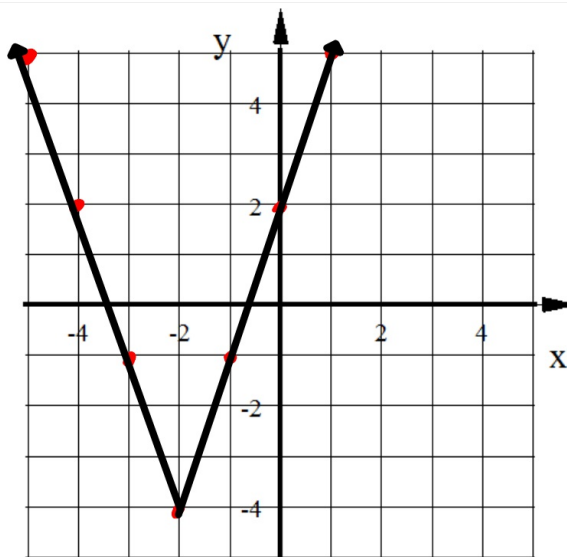


1. $y = -\frac{1}{3}x - 4$



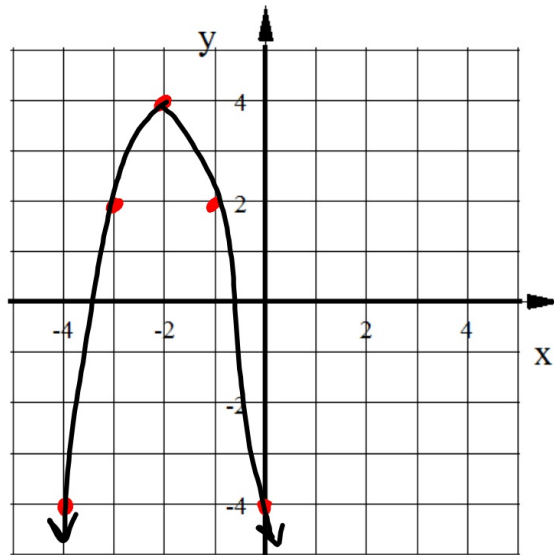
2. $y = 3|x + 2| - 4$

x	y
-5	5
-4	2
-3	-1
-2	-4
-1	-1
0	2
1	5



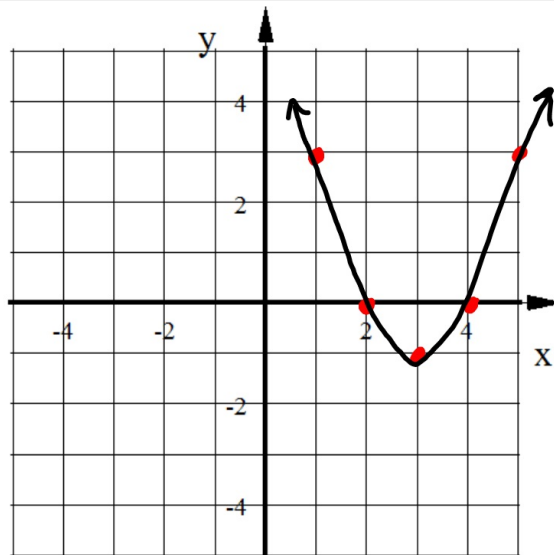
3. $y = -2x^2 - 8x - 4$

x	y
-4	-4
-3	2
-2	4
-1	2
0	-4



4. $y = (x - 3)^2 - 1$

x	y
1	3
2	0
3	-1
4	0
5	3



1. Use these two functions for parts a to c:

$$k(w) = 10w - 6$$

$$g(c) = 2c^2 + 7$$

a) $7k(2) + 3g(-4) =$

$$10(2) - 6 \quad 2(-4)^2 + 7$$
$$7 \cdot 14 \quad 3 \cdot 39$$
$$98 + 117 = 215$$

$$k(w) = 10w - 6$$

$$g(c) = 2c^2 + 7$$

b) Find w if $k(w) = 47$

$$47 = 10w - 6$$

$$53 = 10w$$

$$w = 5.3$$

$$k(w) = 10w - 6$$

$$g(c) = 2c^2 + 7$$

c) Find the range of $g(c)$ given this domain: $\{-3, 1, 3\}$

Range:

$\{25, 9, 25\}$

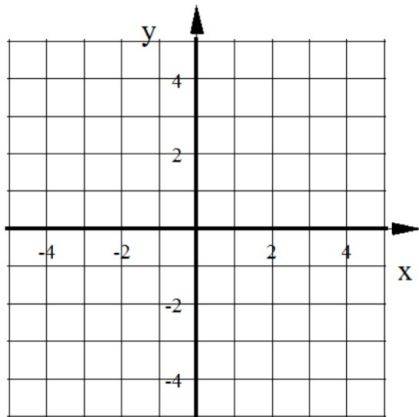
$$g(-3) = 2(-3)^2 + 7 = 25$$

$$g(1) = 2(1)^2 + 7 = 9$$

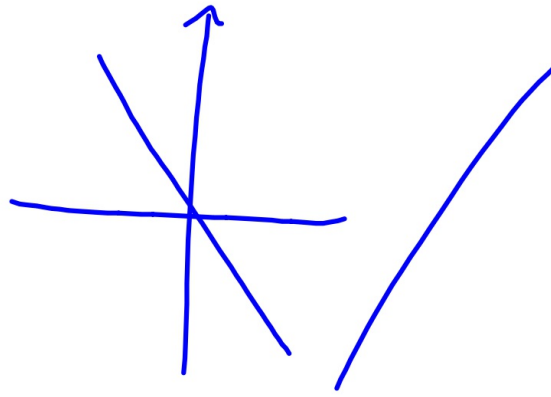
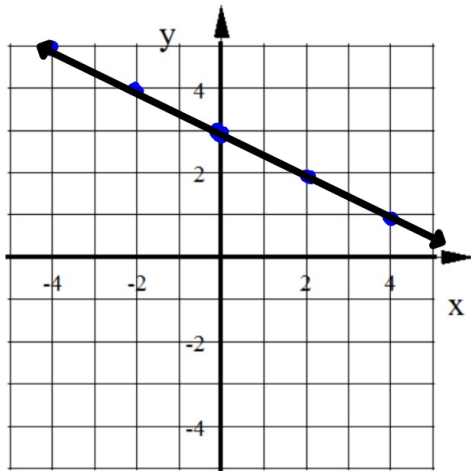
$$g(3) = 25$$

2. Graph each this function:

a) $y = 4|x + 3| - 5$



b) $y = -\frac{1}{2}x + 3$



3. Given $f(x) = 2x^2 + 5$ find $f(-3)$

$$\begin{aligned} f(-3) &= 2(-3)^2 + 5 \\ &= 23 \end{aligned}$$

4. Given $c(w) = 4w + 7$.

a) Find the range of $c(w)$ that corresponds to this domain $\{-8, -2, 5\}$

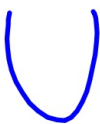
$$\{-25, -1, 27\}$$

b) Find w if $c(w) = 23$

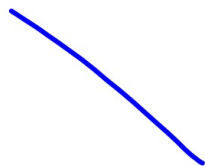
$$\begin{aligned} 23 &= 4w + 7 \\ 16 &= 4w \\ w &= 4 \end{aligned}$$

6. Use what you know about each equation to state what the shape of each graph will be and, if applicable, which way it opens.

a) $f(x) = 2x^2 + 50$



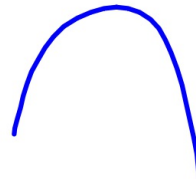
b) $y = -6x + 7$



c) $f(x) = -6|x + 1| + 12$



d) $y = -2(x - 4)^2 + 8$



Classwork: Chapter 5 Textbook Review

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Problems: #15-27

IXL #11 - Q.1 & Q.2 due today at 4pm!