WS 6.4B ANSWER KEY

1. $h(x) = \begin{cases} x^2 + 9x - 1, \ x > 0 \\ 10 + 1, \ x \le 0 \end{cases}$

2. $k(x) = \begin{cases} 2x^2 - 18x - 2 & \text{if } x < 0 \\ 20 - 2x & \text{if } x \ge 0 \end{cases}$

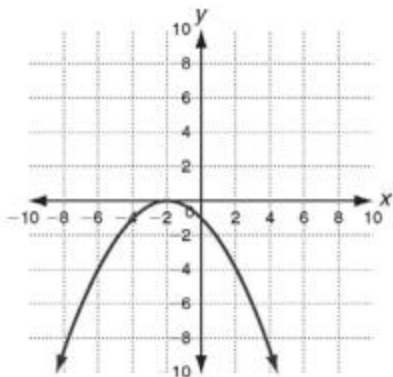3. $g(x) = \begin{cases} x^2 - 13x + 21 & \text{if } x < 2 \\ 12 - x & \text{if } x \ge 2 \end{cases}$

4. x-int. = 6 and –6, y-int. = –36
   x-int. = 3 and –3, y-int. = –36
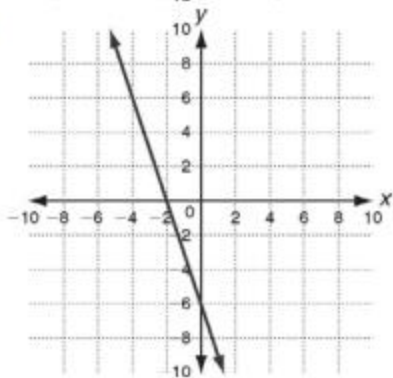
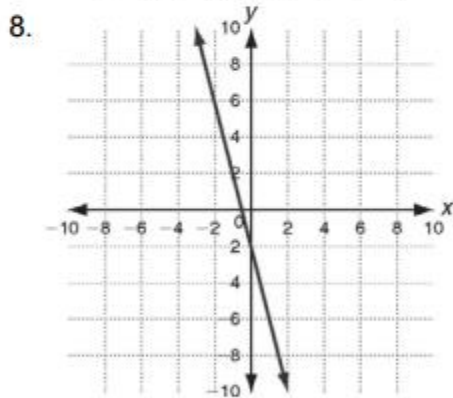5. x-int. = 4, y-int. = 12
   x-int. = 4, y-int. = –24

6.

7.

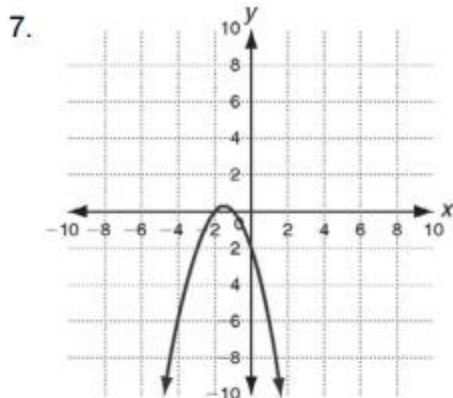8. a. $D(x) = 3960 - 10x$
   b. 2760 ft

WS 6.4C Answer Key

1. x-int. = $\frac{1}{2}$, y-int. = 4; x-int. = 1, y-int. = 4

2. x-int. = 0, y-int. = 0; x-int. = 0, y-int. = 0

3. x-int. = –2.5, y-int. = 5; x-int. = –2.5,
   y-int. = 15

4. x-int. = –1, y-int. = 1; x-int. = 0.2,
   y-int. = –1

5. x-int. = –4 and 1, y-int. = –4; x-int. = –1
   and 4, y-int. = –4

6. x-int. = –2 and 3, y-int. = –6; x-int. = –1
   and 1.5, y-int. = 18

7.

8.

9.

a. $F(x): = \begin{cases} 3400 - 210x & \text{if } 0 < x < 10 \\ 1600 + 400(x - 9) & \text{if } 10 \le x \le 12 \end{cases}$

b. $1720