Chapter 3 Canvas Practice test – Answers

1a) $domain\ (-4,3]\ range\ [-5,11]$ 1b) $domain\ [-2,3)\ range\ [-3,6]$

2) $domain\ \{,-8,2,10,20,35\}\ \ range\ \{2,9,10,18\}$

3) domain is all real numbers except x = -7, -5 or $(-\infty,-7)\cup(-7,-5)\cup(-5,\infty)$

4) domain is all real numbers greater than or equal to 8 or $[8,\infty)$

5) domain is all real numbers or $(-\infty,\infty)$

6) $(f+g)(x) = 9x - 6$ $(f-g)(x) = x + 4$

7) $10x - 9$

8) 0

9) 5

10a) $f(5) = 6$ 10b) $f(8) = 25$

11) $x = -2,4$

12) $h(0) = 35$

13a) $domain\ (-\infty,\infty)\ range\ [-4,\infty)$ 13b) $domain\ (-\infty,\infty)\ range\ (-\infty,9]$

14a) $increasing\ (-1,5)\ decreasing\ (-\infty,-1)\cup(5,\infty)$

14b) $increasing\ (-\infty,-1)\cup(5,\infty)\ decreasing\ (-1,5)$

15a) $(5,25)$

15b) $y = 25\ when\ x = 5$

16a) $(5,-11)$

16b) $y = -11\ when\ x = 5$

17) 21

18a) $f(x-2) = (x-2)^2$

18b) right 2

19a) $f(x+1) + 8 = (x+1)^2 + 8$ 19b) left 1 up 8

20a) $-f(x) - 8 = -(x-2)^2 - 8$ 20b) reflect over x-axis, right 2, down 8

21a) $L = 80 - 2W\ or\ L = -2W + 80$ 21b) $A = 80W - 2W2\ or\ A = -2W2 + 80$

21c) Width = 20 meters   21d) Length = 40 meters

21e) Area = 800 square meters