

Name:

#:

120

HOMEWORK 6.3

Secondary Math II

Turned in On Time
(4 pts.)

0A. (2 pt.) For the function $f(x) = -2x^2 + x - 7$, find $2f(x)$.

0B. (2 pt.) For the function $g(x) = -21x + 4$, find $g(x) + 5$.

Review

1. (1 pt.) Multiply. $(-3x + 2)(x + 8)$

2. (1 pt.) Solve. $(x - 3)^2 + 7 = -2$

3. (1 pt.) Give the most precise label for $\sqrt{25}$.

Fill in the tables below.

Classroom Exercise #4

(3 pts.)

X	f(x)	g(x)	(f-g)(x)

4A. (1 pt.)

X	f(x)	g(x)	(f-g)(x)
-2	2	3	
-1	0	2	
0	2	1	
1	4	0	

4B. (1 pt.)

X	f(x)	g(x)	(f-g)(x)
-1	5	3	
0	4	-2	
1	2	-1	
2	-3	0	

4C. (1 pt.)

X	f(x)	g(x)	(g-f)(x)
-2	3	3	
-1	2	4	
0	-1	5	
1	-2	6	

Use the following functions for the problems below.

$$f(x) = -2x^2 + x + 6 \quad g(x) = 10x - 7 \quad k(x) = 2x^2 + 5x + 1 \quad h(x) = -8x$$

Classroom Exercise #5

(3 pts.)



5A. (1 pt.) $(f - g)(x)$

5B. (1 pt.) $(f - h)(x)$

5C. (1 pt.) $(g - h)(x)$

Use the following functions for the problems below.

$$f(x) = 2x^2 + 1 \quad g(x) = 3 \quad h(x) = 3x^2 - 7x + 2 \quad k(x) = 9x - 1$$

6. (1 pt.) $(f - g)(3)$

7. (1 pt.) $(k - 2f)(x)$

8. (1 pt.) $(h - k)(-2)$

9. (1 pt.) $(4g - h)(x)$

10. (1 pt.) $(f - h)(m)$

11. (1 pt.) $(2f - k)(x)$

12. (1 pt.) A food truck sells tacos that brings in revenue represented by the function $R(x) = -0.1x^2 + x + 5$, where x is the number of tacos sold. The cost of selling the tacos is represented by the function $C(x) = 0.5x + 50$. Write the function that represents the profit the food truck earns on selling the tacos.

13. (1 pt.) A company sells hand made square picture frames that brings in revenue represented by $R(s) = 20s^2$, where s is the side length of the picture frame. The production cost for the frames is represented by $C(s) = 2s + 9$. Write the function that represents the profit the company earns on selling the picture frames.

