Name:
#:

120

HOMEWORK 6.2

Secondary Math II

Turned in On Time (4 pts.) ☐

0A. (2 pt.) For the function $f(x) = 3x^2 + 2x - 9$, find f(-3).

0B. (2 pt.) For the function $f(x) = 17x + 10$, find f(-2).

Review

1. (1 pt.) Solve for x.
$2x^2 + 10x + 12 = 0$

2. (1 pt.) Simplify.
$3x^2 + 3 - 5x + 7x^2 + 10x - 8 + 9$

3. (1 pt.) Find the volume of a cone with a radius of 3 inches and a height of 8 inches.

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	4	0	

4C. (1 pt.)

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

Use the following functions for the problems below.

$f(x) = -x^2 + 5x - 6$ $g(x) = 4x - 1$ $k(x) = 2x^2 + 10x + 8$ $h(x) = -10x$

Classroom Exercise #3 (3 pts.) ☐

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

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

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

Use the following functions for the problems below.

$f(x) = x^2 + 12$ $g(x) = -11x$ $h(x) = 3x^2 + 4x + 1$ $k(x) = 6x - 5$

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

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

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

9. (1 pt.) $(2g+h)(x)$

10. (1 pt.) $(f+h)(2b)$

11. (1 pt.) $(2g+3k)(x)$

12. (1 pt.) An organization decides to run a benefit run for a family in need in the community. They recruit two businesses that agree to pledge money for each lap ran by members in the community. $A(l) = 10l$ models the amount of money business A will to pay for *l* number of laps. $B(l) = 15l$ models the amount of money business B will pay for *l* number of laps. Determine the function that models the total amount of money the organization will raise for the family based on *l* laps.