MRWC **Name**_____

8B Practice Quiz

x	-4	-1	0	2	3	8	9
f(x)	3	5	-1	-4	0	8	10

x	-2	-1	0	3	4	8	9
g(x)	- 5	-3	-1	1	0	3	5

Use the tables above to find the following combinations of f and g. If not possible, explain why.

1. $(f \cdot g)(0)$
2. $(f - g)(-2)$
3. $\left(\frac{g}{f}\right)(3)$
4. $\left(\frac{f}{g}\right)(3)$
5. $-2f(2) - g(-1)$
6. $[g(9)]^2$

7. Rewrite each of the statements below using the letter values from the table.

x	-1	0	1
$f(x)$	a	b	c
$g(x)$	m	n	p

a) $f(-1) - g(1) = 3$ b) $(f + g)(-1) = 5$ c) $(g^2 - g)(1) = 2$

d) $g(1) > 0$ e) $(f + g)(1) = 6$

Use the equations you created above to solve for each variable.

f) a = g) m = h) p = i) c =

Use the functions below for problems # 8 - 14

$f(x) = x^2 - 4x$ $g(x) = 5x + 3$ $h(x) = \sqrt{x - 6}$

State the **Domain** of the following combinations:

8. $(f + g)(x)$
9. $(g \cdot h)(x)$
10. $\left(\frac{g}{f}\right)(x)$

$f(x) = x^2 - 4x$	$g(x) = 5x + 3$	$h(x) = \sqrt{x - 6}$

Find the following combinations of. If not possible, explain why.

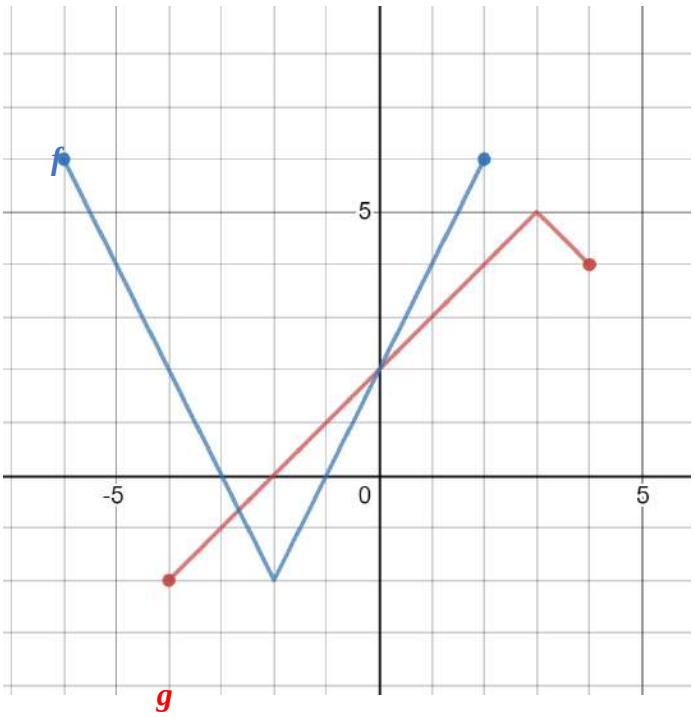
11. $\left(\frac{g}{f}\right)(4)$

12. $(g \cdot h)(10)$

13. $(f + h)(-10)$

14. $(g - f)(x)$

Use the graphs of f and g for problems # 15 – 21



State the **Domain** of the following combinations:

15. $(f - g)(x)$

16. $\left(\frac{f}{g}\right)(x)$

Find the following combinations of f and g. If not possible, explain why.

17. $(f \cdot g)(1)$

18. $(g - f)(3)$

19. $(f + g)(-1)$

20. $\left(\frac{g}{f}\right)(4)$

21. $(f + g)(-4)$