

NAME _____**DATE** _____**PER.** _____**FUNCTION NOTATION**

Find the range of each function for the given domain.

1. $g(x) = -2x - 1$ $D = \{-3, -2, 5\}$	R = _____ Ordered Pairs: _____
2. $f(x) = x$ $D = \{-3, 0, 3\}$	R = _____ Ordered Pairs: _____
3. $g(x) = 2x^2 - 6$ $D = \{-3, -4, 5\}$	R = _____ Ordered Pairs: _____
4. $f(x) = (x - 2)^2$ $D = \{-4, 0, 4\}$	R = _____ Ordered Pairs: _____

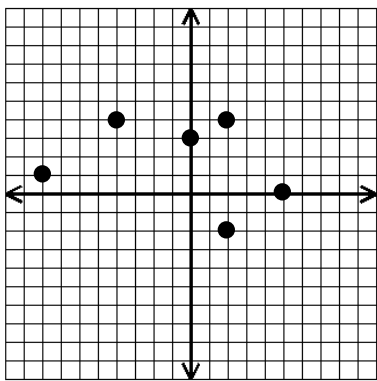
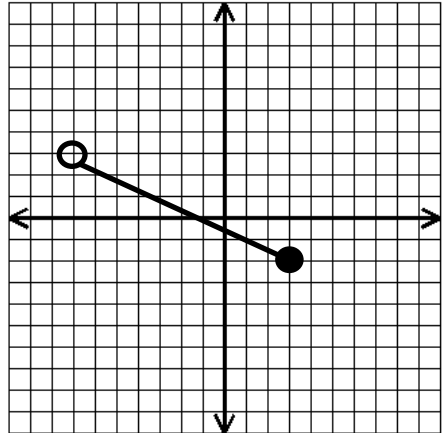
If $f(x) = 3x - 1$ and $g(x) = x^2 + 1$, find the following.

5. $f(3) =$ _____	9. $f(-1) + g(4) =$ _____
6. $g(3) =$ _____	10. $g(-4) + f(-2) =$ _____
7. $f(2) =$ _____	11. $f(0) - g(0) =$ _____
8. $g(2) =$ _____	12. $g(2) - f(-2) =$ _____

For $g = \{(-5, 2), (-4, -1), (3, -8), (-2, 0), (4, -9)\}$ find the indicated values.

13. $g(-4) =$ _____	14. $g(4) =$ _____
15. $g(3) =$ _____	16. $g(-5) =$ _____
17. If $x = -5$ find $g(x + 3) =$ _____	18. $g(-5) - 2 =$ _____

REVIEW. Find the following.

<p>19. $D =$ _____ $R =$ _____ Function? _____</p> <div style="display: flex; align-items: center; gap: 20px;"> <table border="1" style="border-collapse: collapse;"> <tr> <td style="padding: 5px;">x</td> <td style="padding: 5px;">y</td> </tr> <tr> <td style="height: 100px;"></td> <td></td> </tr> </table> <div style="display: flex; gap: 10px;"> <div style="text-align: center;"> x </div> <div style="text-align: center;"> y </div> </div> </div>	x	y			<div style="text-align: center;">  </div> <p>Ordered Pairs: _____ _____</p>
x	y				
<p>20. Domain: _____ Range: _____</p>	<div style="text-align: center;">  </div>				
<p>Bonus: If the endpoint $(-7, 3)$ in problem #20 is changed to an arrow to form a ray, what will be the new domain and range?</p>	<p>$D =$ _____ $R =$ _____</p>				