

NAME _____

DATE _____

PER. _____

FUNCTION NOTATION

Find the range of each function for the given domain.

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

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

5. $f(3) =$ _____	6. $g(3) =$ _____
7. $f(2) =$ _____	8. $g(2) =$ _____

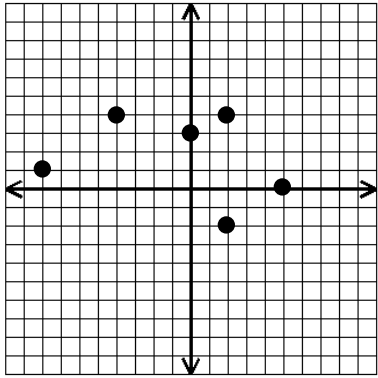
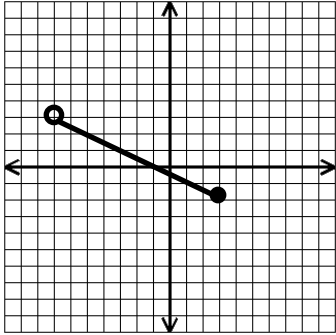
If $f(x) = 3x - 1$ and $g(x) = x^2 + 1$, find the following.

9. $f(-1) + g(4) =$ _____	10. $g(-4) + f(-2) =$ _____
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For $g = \{(-5, 2), (-4, -1), (3, -8), (-2, 0), (4, -9)\}$ find the indicated values.

11. $g(-4) =$ _____	12. $g(4) =$ _____
13. $g(3) =$ _____	14. $g(-5) =$ _____
15. If $x = -5$ find $g(x + 3) =$ _____	16. $g(-5) - 2 =$ _____

REVIEW. Find the following.

<p>17. 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> </table> <div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; margin: 0 auto;"></div> <div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; margin: 0 auto;"></div> </div> </div>	x	y	<div style="text-align: center;">  </div> <p>Ordered Pairs: _____ _____</p>
x	y		
<p>18. Domain: _____ Range: _____</p>	<div style="text-align: center;">  </div>		
<p>Bonus: If the endpoint $(-7, 3)$ in problem #18 is changed to an arrow to form a ray, what will be the new domain and range?</p>	<p>D= _____ R= _____</p>		