

WS 4-3

Determine if the given relation is a function.

<p>1.</p>	<p>2.</p>	<p>3.</p>	<p>4. $x = -4$</p>												
<p>5.</p>	<p>6.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="padding: 2px 5px;">x</th> <th style="padding: 2px 5px;">y</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">7</td> </tr> <tr> <td style="padding: 2px 5px;">-1</td> <td style="padding: 2px 5px;">1</td> </tr> <tr> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">0</td> </tr> <tr> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">5</td> </tr> <tr> <td style="padding: 2px 5px;">7</td> <td style="padding: 2px 5px;">3</td> </tr> </tbody> </table>	x	y	3	7	-1	1	1	0	3	5	7	3	<p>7.</p>	<p>8.</p>
x	y														
3	7														
-1	1														
1	0														
3	5														
7	3														
<p>9. $y = 2x - 5$</p>	<p>10. $y = -3$</p>	<p>11. $\{(2, 5), (4, -2), (3, 3), (5, 4), (-2, 5)\}$</p>	<p>12.</p>												

If $f(x) = 3x + 2$ and $g(x) = x^2 - x$, find each value.

13. $f(4)$	14. $f(8)$	15. $f(-2)$
16. $g(2)$	17. $g(-3)$	18. $f(2) + 1$
19. $g(3) - 5$	20. $f(7) - 7$	21. $g(-3) + f(-2)$

22. If $g(x) = 3x + 2$ find $g(2)$	23. If $f(x) = -2x - 9$ find $f(-x)$
24. If $g(x) = 3x^2 - 13$ find $g(2)$	25. If $h(x) = 3x + x^2$ find $h(-3)$
26. If $f(x) = \frac{-2x^2+3x}{x+6}$ find $f(3)$	27. If $g(x) = 4x^2 + 6$ find $g(-1) - 6$
28. If $f(x) = -3x^2 - 4x + 8$ find $f(6) - 2$	29. If $g(x) = \frac{4x^2+5x}{2}$ find $g(3)$

If $f(x) = -x + 6$ and $g(x) = 3x - 6$, find each value.

30. $f(x) + g(x)$	31. $f(-2) + g(3)$	32. $f(0) - g(-3)$
33. $f(3x - 6)$	34. $f(g(x))$	35. $f(x) - g(x)$
36. $g(f(x))$	37. $g(f(x + 2))$	38. $f(g(2))$