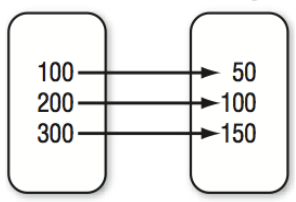
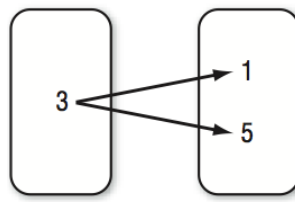


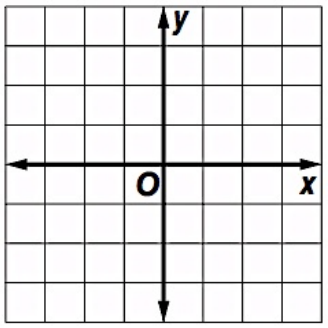
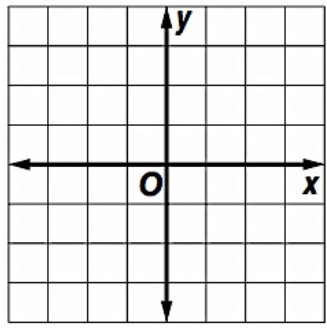
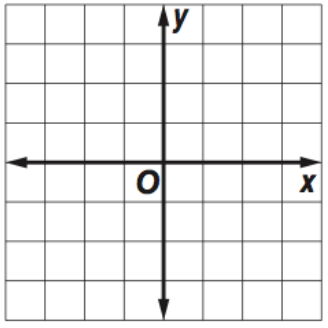
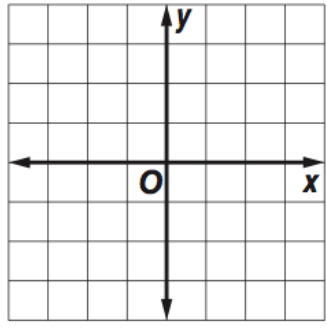
Algebra 2
Section 2.1 Homework (#2)

Name _____

State the domain and range of each relation. Then determine whether each relation is a function. If it a function, determine if it is one-to-one.

<p>1. Domain Range</p> 	<p>2. Domain Range</p> 																		
<p>3.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="padding: 5px;">x</th> <th style="padding: 5px;">y</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">1</td> <td style="padding: 5px;">2</td> </tr> <tr> <td style="padding: 5px;">2</td> <td style="padding: 5px;">4</td> </tr> <tr> <td style="padding: 5px;">3</td> <td style="padding: 5px;">6</td> </tr> </tbody> </table>	x	y	1	2	2	4	3	6	<p>4.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="padding: 5px;">x</th> <th style="padding: 5px;">y</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">-3</td> <td style="padding: 5px;">0</td> </tr> <tr> <td style="padding: 5px;">-1</td> <td style="padding: 5px;">-1</td> </tr> <tr> <td style="padding: 5px;">0</td> <td style="padding: 5px;">0</td> </tr> <tr> <td style="padding: 5px;">2</td> <td style="padding: 5px;">-2</td> </tr> </tbody> </table>	x	y	-3	0	-1	-1	0	0	2	-2
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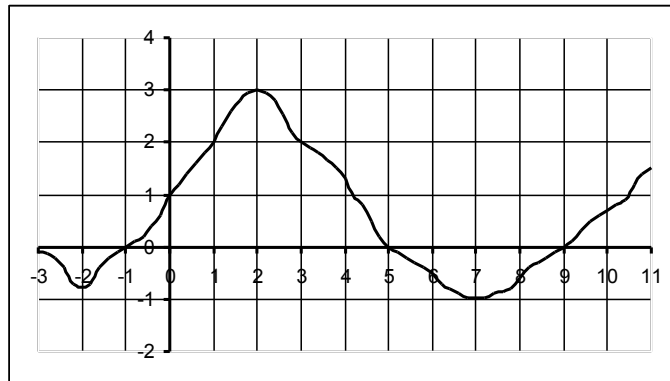
Graph each relation or equation and state the domain and range. Then determine whether each relation or equation is a function. If it a function, determine if it is one-to-one. Finally state whether it is discrete or continuous.

<p>5. $\{(-2, -3), (2, 4), (3, -1), \text{ and } (4, -2)\}$</p> 	<p>6. $x = -1$</p> 
<p>7. $y = 2x - 1$</p> 	<p>8. $\{(-3, 4), (-2, 4), (-1, -1), \text{ and } (3, -2)\}$</p> 

Find each value if $f(x) = 2x - 1$ and $g(x) = 2 - x^2$

9. $f(0)$	10. $f(12)$	11. $g(4)$
12. $f(-2)$	13. $g(-1)$	14. $f(d)$

In 15 – 20, use the graph of $f(x)$ below:



15. Find $f(0)$	16. Find $f(7)$	17. Find $f(2)$.
18. Is $f(6)$ positive or negative?	19. Is $f(1) > f(6)$?	20. For what values of x is $f(x) = 0$?

21. The ordered pairs $(1, 16)$, $(2, 16)$, $(3, 32)$, $(4, 32)$, and $(5, 48)$ represent the cost of buying various numbers of CDs through a music club. Identify the domain and range of the relations. Is the relation discrete or continuous? Is the relation a function?

22. If a computer can do one calculation in 0.0000000015 seconds, then the function $T(n) = 0.0000000015n$ gives the time required for a computer to do n calculations. How long would it take the computer to do 5 million calculations?