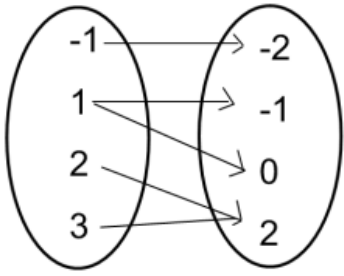
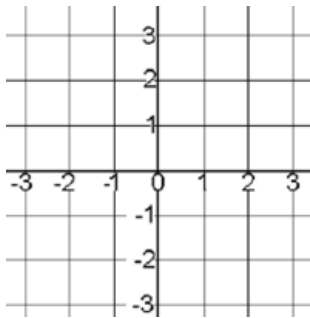
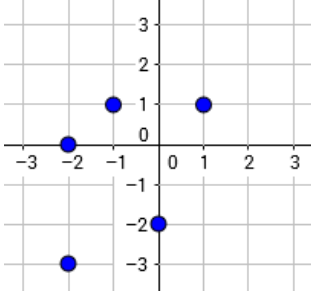
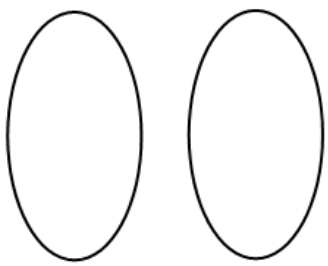
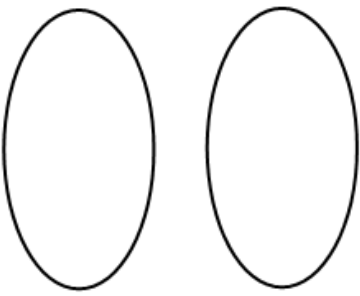
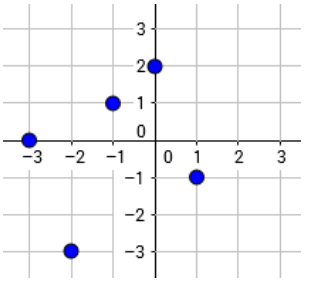
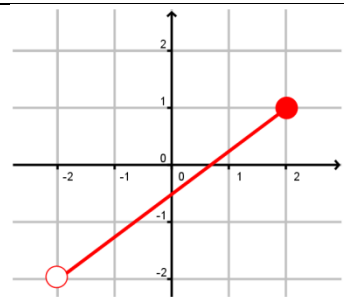
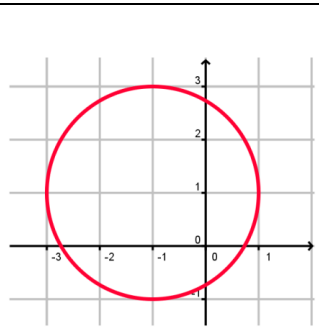
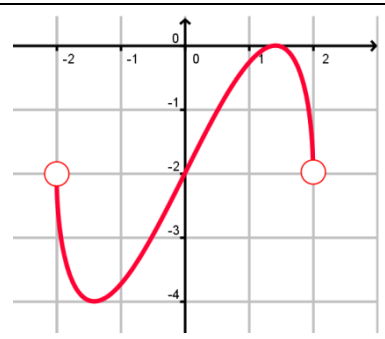


Practice Worksheet: Relations & Functions

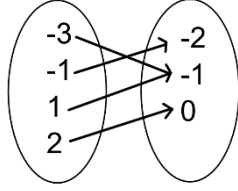
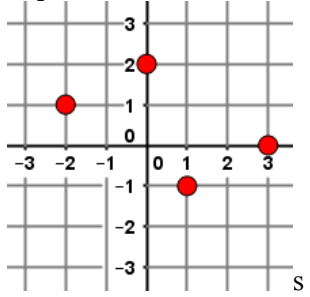
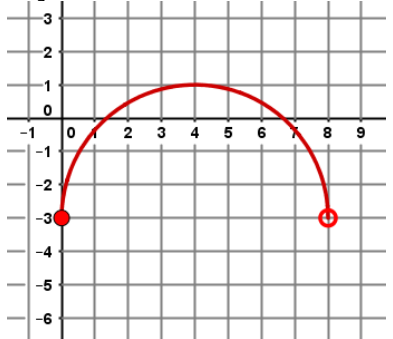
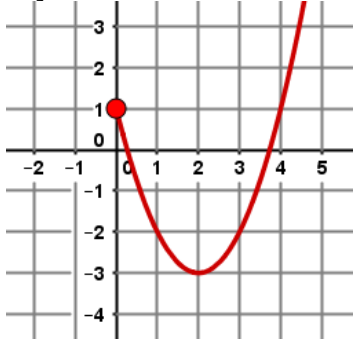
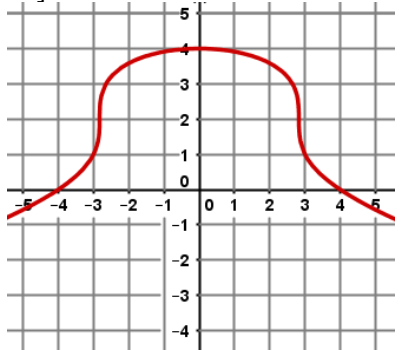
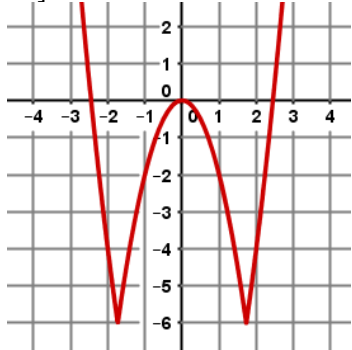
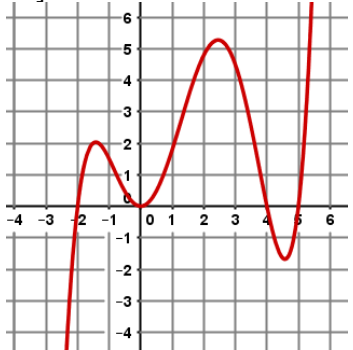
Use the given form of each relation to complete the other forms. Then determine if the relation is a function.

<p>1] Rewrite the relation given in the mapping diagram as a scatterplot.</p>   <p>Is the relation also a function?</p>	<p>2] Rewrite the relation given in the scatter plot as a mapping diagram.</p>   <p>Is the relation also a function?</p>												
<p>3] Rewrite the relation given in the table as a mapping diagram.</p> <table style="display: inline-table; border-collapse: collapse; margin-right: 20px;"> <thead> <tr> <th style="border-right: 1px solid black; padding: 5px;">x</th> <th style="padding: 5px;">y</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black; padding: 5px;">1</td> <td style="padding: 5px;">-2</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">-3</td> <td style="padding: 5px;">-1</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">1</td> <td style="padding: 5px;">0</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">2</td> <td style="padding: 5px;">2</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">0</td> <td style="padding: 5px;">3</td> </tr> </tbody> </table>  <p>Is the relation also a function?</p>	x	y	1	-2	-3	-1	1	0	2	2	0	3	<p>4] Rewrite the relation given in the scatter plot as a <u>set</u> of ordered pairs (NOT a table).</p>  <p>Is the relation also a function?</p>
x	y												
1	-2												
-3	-1												
1	0												
2	2												
0	3												

Identify the domain and range, then determine if each graph shows a function or a relation only.

<p>5] </p> <p>Domain:</p> <p>Range:</p> <p>Function?</p>	<p>6] </p> <p>Domain:</p> <p>Range:</p> <p>Function?</p>	<p>7] </p> <p>Domain:</p> <p>Range:</p> <p>Function?</p>
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Identify the domain and range, then evaluate each function for the given value of x.

<p>8] $f = \{(10,7), (-2,4), (5,3), (4,10)\}$</p> <p>Domain:</p> <p>Range:</p> <p>$f(10) =$</p>	<p>9]</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>X</th> <th>Y</th> </tr> </thead> <tbody> <tr> <td>-3</td> <td>3</td> </tr> <tr> <td>-1</td> <td>1</td> </tr> <tr> <td>0</td> <td>0</td> </tr> <tr> <td>1</td> <td>1</td> </tr> </tbody> </table> <p>Domain:</p> <p>Range:</p> <p>$f(-1) =$</p>	X	Y	-3	3	-1	1	0	0	1	1	<p>10]</p>  <p>Domain:</p> <p>Range:</p> <p>$f(-3) =$</p>
X	Y											
-3	3											
-1	1											
0	0											
1	1											
<p>11]</p>  <p>Domain:</p> <p>Range:</p> <p>$f(3) =$</p>	<p>12]</p>  <p>Domain:</p> <p>Range:</p> <p>$f(0) =$</p>	<p>13]</p>  <p>Domain:</p> <p>Range:</p> <p>$f(4) =$</p>										
<p>14]</p>  <p>Domain:</p> <p>Range:</p> <p>$f(-3) =$</p>	<p>15]</p>  <p>Domain:</p> <p>Range:</p> <p>$f(2) =$</p>	<p>16]</p>  <p>Domain:</p> <p>Range:</p> <p>$f(-2) =$</p>										