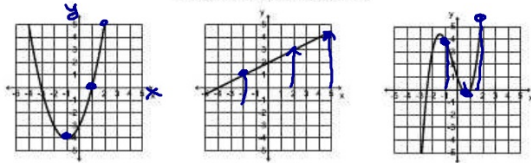


These are Functions

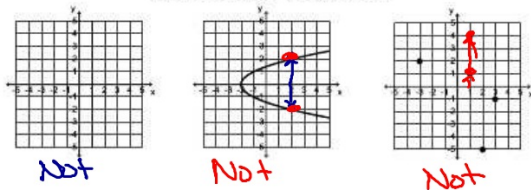


These are Functions

x	y	x	y	x	y
-2	1	-5	2	-3	1
-1	0	0	4	0	1
0	-1	5	6	1	1
1	-2	10	8	8	1
2	-3	15	10	10	1

yes                      yes                      yes

These are NOT Functions

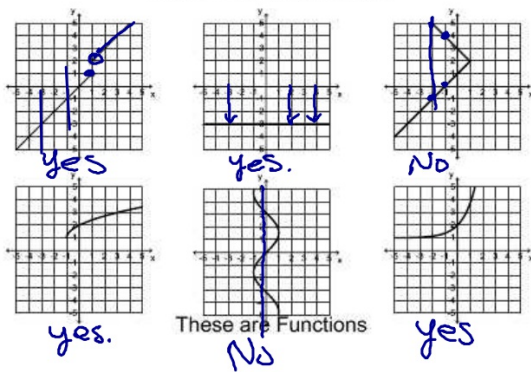


These are NOT Functions

x	y	x	y	x	y
-1	-3	3	1	-3	0
-1	-2	3	2	0	-1
0	-1	3	3	8	6
1	0	3	4	8	-1
2	1	3	5	10	3

No                      No                      No

Which of the following graphs are functions?  
Explain how you decided.



Which of the following tables are functions?  
Explain how you decided.

x	y	x	y	x	y
0	0	-1	-4	-1	7
1	1	1	-2	-1	7
2	4	5	0	1	5
3	9	9	2	1	5

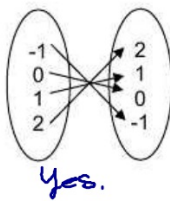
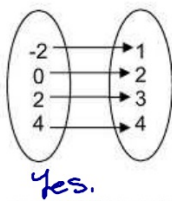
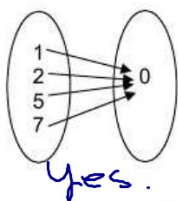
yes                      Yes                      yes

x	y	x	y	x	y
-2	5	0	0	-3	8
-2	4	1	1	0	4
0	3	16	4	0	0
2	2	36	6	8	-4

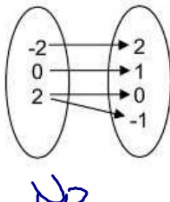
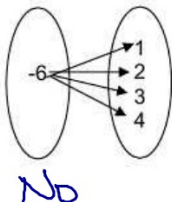
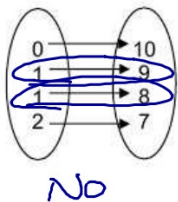
No                      Yes.                      No

### Mapping

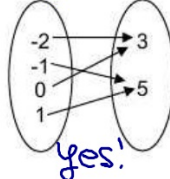
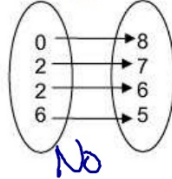
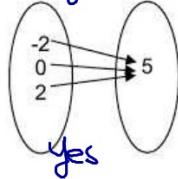
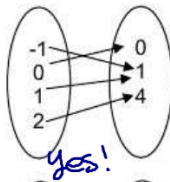
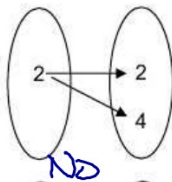
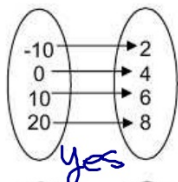
These are Functions



These are NOT Functions



Which of the following mappings are functions?  
Explain how you decided.



Relation: The set of ordered pairs.  $(x, y)$

Function: one to one relationship

Domain:  $x$  values. Input.  $\{3, 6, 9\}, \{\infty\}$

Range:  $y$  values Output.  $\{1, 7, 8\}, \{\infty\}$

Determine if the following relations are functions. If it is a function, state the domain and range.

<table border="1"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>2</td> </tr> <tr> <td>10</td> <td>4</td> </tr> <tr> <td>6</td> <td>5</td> </tr> <tr> <td>9</td> <td>8</td> </tr> </tbody> </table>	x	y	6	2	10	4	6	5	9	8	
x	y										
6	2										
10	4										
6	5										
9	8										
<p>function: yes or <u>no</u></p> <p>D:</p> <p>R:</p>	<p>function: yes or <u>no</u></p> <p>D:</p> <p>R:</p>										
<p><math>\{(3, 6), (4, 10), (8, 12), (4, 10)\}</math></p> <p>3 → 6 4 → 10 8 → 12 4 → 10</p> <p>function: <u>yes</u> or no</p> <p>D: <math>\{3, 4, 8\}</math></p> <p>R: <math>\{6, 10, 12\}</math></p>	<p>function: <u>yes</u> or no</p> <p>D: <math>\{-1, 0, 1, 2\}</math></p> <p>R: <math>\{10, 8, 6, 4\}</math></p>										