
Sorting Functions

On the next page are four graphs, four equations, four tables, and four rules.

Your task is to match each graph with an equation, a table and a rule.

1. Write your answers in the following table.

Graph	Equation	Table	Rule
A			
B			
C			
D			

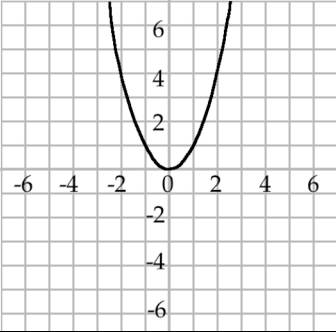
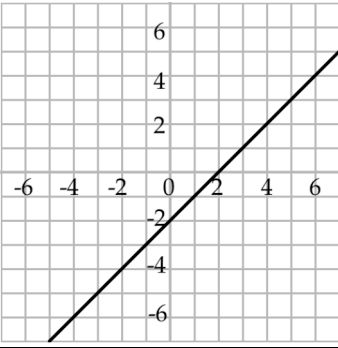
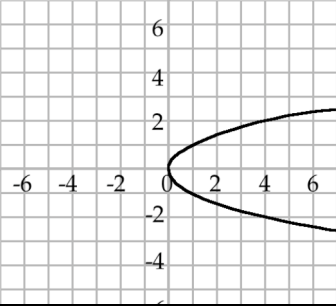
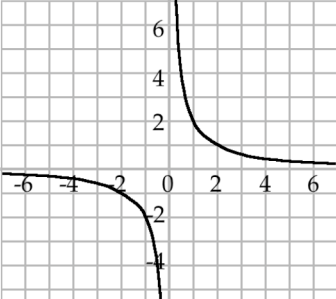
2. Explain how you matched each of the four graphs to its equation.

Graph A _____

Graph B _____

Graph C _____

Graph D _____

<p style="text-align: center;">Graph A</p> 	<p style="text-align: center;">Equation A</p> $xy = 2$	<p style="text-align: center;">Table A</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>y</td> <td>-4</td> <td>-3</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> </tr> </tbody> </table>	x	-2	-1	0	1	2	3	y	-4	-3	-2	-1	0	1	<p style="text-align: center;">Rule A</p> <p style="text-align: center;">y is the same as x multiplied by x</p>
x	-2	-1	0	1	2	3											
y	-4	-3	-2	-1	0	1											
<p style="text-align: center;">Graph B</p> 	<p style="text-align: center;">Equation B</p> $y^2 = x$	<p style="text-align: center;">Table B</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>y</td> <td>4</td> <td>1</td> <td>0</td> <td>1</td> <td>4</td> <td>9</td> </tr> </tbody> </table>	x	-2	-1	0	1	2	3	y	4	1	0	1	4	9	<p style="text-align: center;">Rule B</p> <p style="text-align: center;">x multiplied by y is equal to 2</p>
x	-2	-1	0	1	2	3											
y	4	1	0	1	4	9											
<p style="text-align: center;">Graph C</p> 	<p style="text-align: center;">Equation C</p> $y = x^2$	<p style="text-align: center;">Table C</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>x</td> <td>0</td> <td>1</td> <td>4</td> <td>9</td> <td>16</td> </tr> <tr> <td>y</td> <td>0</td> <td>± 1</td> <td>± 2</td> <td>± 3</td> <td>± 4</td> </tr> </tbody> </table>	x	0	1	4	9	16	y	0	± 1	± 2	± 3	± 4	<p style="text-align: center;">Rule C</p> <p style="text-align: center;">y is 2 less than x</p>		
x	0	1	4	9	16												
y	0	± 1	± 2	± 3	± 4												
<p style="text-align: center;">Graph D</p> 	<p style="text-align: center;">Equation D</p> $y = x - 2$	<p style="text-align: center;">Table D</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> <td>4</td> </tr> <tr> <td>y</td> <td>-1</td> <td>-2</td> <td>$\pm\infty$</td> <td>2</td> <td>1</td> <td>0.5</td> </tr> </tbody> </table>	x	-2	-1	0	1	2	4	y	-1	-2	$\pm\infty$	2	1	0.5	<p style="text-align: center;">Rule D</p> <p style="text-align: center;">x is the same as y multiplied by y</p>
x	-2	-1	0	1	2	4											
y	-1	-2	$\pm\infty$	2	1	0.5											