









Name: _____




Directions: Identify whether the following information describes a linear, quadratic, and/or exponential function. Describe the graph for each type of function that would meet this criteria.

Kewon 0
Amy 1

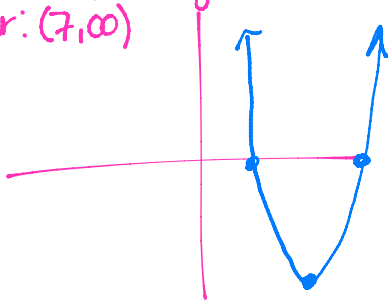
Function Characteristic	L, Q, and/or E	Graph Description										
1. The graph has the following end behavior: $as x \rightarrow \infty, y \rightarrow \infty$ $as x \rightarrow -\infty, y \rightarrow \infty$	Q											
2. The graph has an x-intercept of (-1,0) and (1,0).	Q											
3. The range of the function is $[0, \infty)$	Q											
4. The graph has the following end behavior: $as x \rightarrow \infty, y \rightarrow \infty$ $as x \rightarrow -\infty, y \rightarrow -\infty$	L											
5. <table border="1" data-bbox="154 782 492 869" style="margin-left: 20px;"> <tr> <td>x</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> </tr> </table>	x	-1	0	1	2	y	2	4	6	8	L	Constant ROC
x	-1	0	1	2								
y	2	4	6	8								
6. The domain of the function is $[-\infty, \infty]$.	L, E, Q	all have the same Domain										
7. The graph has the following end behavior: $as x \rightarrow \infty, y \rightarrow 2$ $as x \rightarrow -\infty, y \rightarrow 2$	E											
8. The graph has a y-intercept of (0,-2).	L, E, Q											
9. There is an asymptote of $y=0$.	E											
10. The range of the function is $(-\infty, 2]$	Q											

Bio 0

Dalton 0

11. The rate of change is the same between each point on the graph.	L, ϵ	Linear - Adding same # Expo - multiply same #										
12. The graph has the following end behavior: $as x \rightarrow \infty, y \rightarrow -\infty$ $as x \rightarrow -\infty, y \rightarrow \infty$	L	 How 0										
13. There is no x-intercept.	ϵ, Q											
14. The graph has an x-intercept of (2,0).	L, ϵ, Q											
15. <table border="1" data-bbox="154 494 492 590"> <tr> <td>x</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td>2</td> <td>4</td> <td>8</td> <td>16</td> </tr> </table>	x	-1	0	1	2	y	2	4	8	16	ϵ	Multiplying by 2
x	-1	0	1	2								
y	2	4	8	16								
16. <table border="1" data-bbox="154 662 492 758"> <tr> <td>x</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td>3</td> <td>6</td> <td>12</td> <td>21</td> </tr> </table>	x	-1	0	1	2	y	3	6	12	21	Q	Double difference +3
x	-1	0	1	2								
y	3	6	12	21								

$X\text{-int } (4,0) (10,0)$
 $\epsilon B \ x \rightarrow -\infty \ y \rightarrow \infty$
 $x \rightarrow \infty \ y \rightarrow \infty$
 $Inc: (7, \infty)$



$y\text{-int: } (0,3)$
 $\epsilon B: \ x \rightarrow -\infty \ y \rightarrow \infty$
 $x \rightarrow \infty \ y \rightarrow 1$

