

## Linear, Exponential, and Quadratic Functions

For #1-10, tell if the table, equation, or graph represents a *linear*, *quadratic*, or *exponential* function. Explain how you know.

1.  $y = 4x + 5$

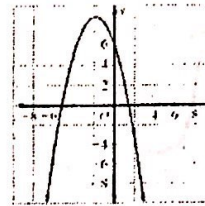
2.

x	y
-2	4
-1	1
0	0
1	1
2	4

3.



4.

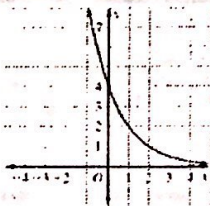


5.  $y = 2 \cdot 3^x$

6.

x	y
-2	$\frac{1}{4}$
-1	$\frac{1}{2}$
0	1
1	2
2	4

7.



8.

$$y = x^2 + 3$$

9.

x	y
-2	-3
-1	1
0	5
1	9
2	13

10.

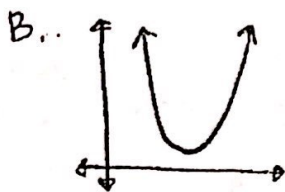
$$y = 3 \cdot (0.7)^x$$

Tell whether the following are linear, exponential, or quadratic

A.

X	1	2	3	4	5
Y	2	4	6	8	10

G. (10, 25) (11, 5) (12, 1)



H.

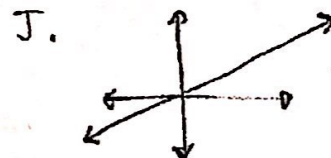
X	0	1	2	3
Y	3	6	15	30

C. (1, 4) (2, 8) (3, 16)

I.  $y - 2x = 3$

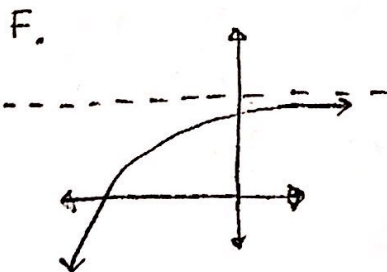
D.

X	2	4	6	8	10
Y	81	27	9	3	1/3



E.  $y = 4x^2 + 6$

K. (-2, 20) (0, 16) (2, 12)



L.

X	Y
-1	4
1	4
3	4
5	4
7	4