

## Linear, Quadratic, or Exponential?

For each equation and table, classify the function and linear, quadratic or exponential and explain your answer.

1)  $y = 3x^2 - 4x + 7$

2)  $y = -x$

3)  $y = 6$

4)  $y = 3 \left(\frac{1}{2}\right)^x$

5)  $y = -4(x + 3)^2 + 5$

6)  $y = 4 - 2x$

7)  $y = x^2 - 3$

8)  $y = 6^x$

9)  $y = -(x + 7)(x - 4)$

10)

x	y
-2	-4
-1	-7
0	-10
1	-13
2	-16

11)

x	y
-2	-3
-1	0
0	5
1	12
2	21

12)

x	y
-2	115
-1	82
0	55
1	34
2	19

13)

x	y
-2	$2 \frac{1}{12}$
-1	2.5
0	3
1	3.6
2	4.32

14)

x	y
-2	$13 \frac{1}{2}$
-1	9
0	6
1	4
2	$2 \frac{2}{3}$

15)

x	y
-2	33
-1	$25 \frac{2}{3}$
0	$19 \frac{2}{3}$
1	15
2	$11 \frac{2}{3}$