

Exponential Growth and Decay Practice Worksheet

Name Key Class Period _____

Tell whether the function represents exponential growth or exponential decay.

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

Decay

2. $y = \left(\frac{5}{3}\right)^x$

Growth

3. $y = 5^x$

Growth

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

Growth

5. $y = 0.8^x$

Decay

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

Growth

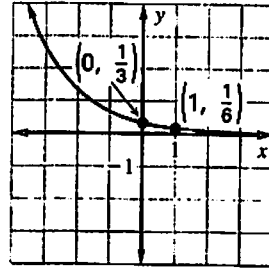
Match the function with its graph.

7. $y = \left(\frac{1}{2}\right)^x$

B

X	Y
0	1
1	1/2
2	1/4
-1	2
-2	4

A)

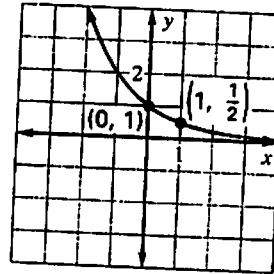


8. $y = 3\left(\frac{1}{2}\right)^x$

C

X	Y
0	3
1	3/2
2	3/4
-1	6
-2	12

B)



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

A

X	Y
0	1/3
1	1/6
2	1/12
-1	2/3
-2	4/3

C)

