

Exponential Functions - Day 1
Assignment

Name _____
Date _____ Period _____

1. For the equation $y = 5^x$

a. Generate a table

x	y
0	
1	
2	
3	
4	

b. How does the value of y change as x increases?

c. Find the value of y when $x = 10$.

2. For the equation $y = 5x + 2$

a. Generate a table

x	y
0	
1	
2	
3	
4	

b. How does the y value change as x increases?

c. Find the value of y when $x = 10$.

3. How are the tables of exponential and linear relationships different?

4. How are the graphs of exponential and linear relationships different?

5. In the equation $y = 70(2)^x$

a. What is the growth factor?

b. What is the initial amount?

6. Use the table below.

x	y
1	15
2	20
3	25
4	30
5	35

a. Is the equation exponential or linear?

b. How can you tell?

c. Write an equation that represents the table.

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7. Use the table below.

x	y
1	1
2	7
3	49
4	343
5	2401

- Is the equation exponential or linear?
- How can you tell?
- Write an equation that represents the table.

8. Use the table below.

x	y
0	1
1	3
2	9
3	27
4	81

- What is the initial amount?
- What is the growth factor?
- What is the exponent?
- Write an equation that represents the table.

9. Use the table below.

x	y
1	1
2	4
3	16
4	64
5	256

- What is the initial amount?
- What is the growth factor?
- What is the exponent?
- Write an equation that represents the table.

10. Use the table below.

x	y
0	20
1	40
2	80
3	160
4	320

- What is the initial amount?
- What is the growth factor?
- What is the exponent?
- Write an equation that represents the table.