

# 9-4 CLASSWORK

## Data Relationships

Name: \_\_\_\_\_

Fill in each table of values according to the equation provided.

$y = x + 3$

x	y
1	
2	
3	
4	
5	

$y = 3^x$

x	y
1	
2	
3	
4	
5	

$y = 2^x$

x	y
1	
2	
3	
4	
5	

$y = 3x - 2$

x	y
1	
2	
3	
4	
5	

Do you notice any pattern in the data?

Determine what type of equation is represented by each table of values.

A)

x	y
0	-3
4	5
8	13
12	21
16	29

B)

x	y
0	1
4	16
8	256
12	4096
16	65536

x	y
0	30
4	50
8	70
12	90
16	110

x	y
0	31
4	93
8	279
12	837
16	2511

Can you find the equation that creates each of the tables above???

HOW???

1. Which table of data exhibits exponential behavior?

A.

x	y
1	20
2	40
3	60
4	80
5	100

B.

x	y
1	6
2	12
3	24
4	48
5	96

C.

x	y
1	5
2	11
3	21
4	35
5	53

D.

x	y
1	0
2	7
3	26
4	63
5	124

2. Which table of data exhibits exponential behavior?

A.

x	y
0	4
2	8
4	12
6	16
8	20

B.

x	y
0	-1
2	5
4	11
6	17
8	23

C.

x	y
0	2
2	12
4	72
6	432
8	2592

B.

x	y
0	1
2	5
4	17
6	37
8	65

For each table above, write the equation that best fits the data.

1A. \_\_\_\_\_

2A. \_\_\_\_\_

1B. \_\_\_\_\_

2B. \_\_\_\_\_

1C. \_\_\_\_\_

2C. \_\_\_\_\_

1D. \_\_\_\_\_

2D. \_\_\_\_\_