

Name:

Period:

Writing Exponential Equations

Instructions: For each of the following, create exponential functions in the form of $y = ab^x$

1.

x	y
-2	0.0123
-1	0.111
0	1
1	9
2	81

$a =$

$b =$

Equation: _____

2.

x	y
-2	0.041
-1	0.286
0	2
1	14
2	98

$a =$

$b =$

Equation: _____

3.

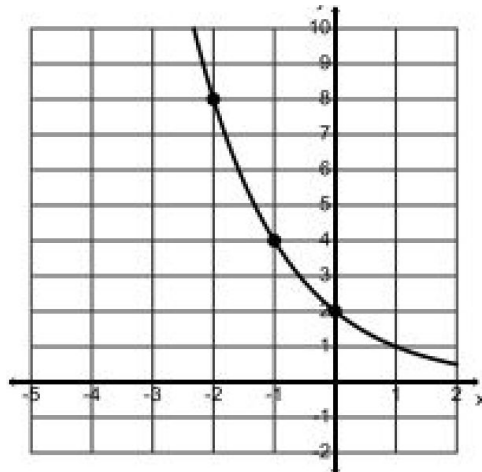
x	y
-2	0.375
-1	1.5
0	6
1	24
2	96

$a =$

$b =$

Equation: _____

4.

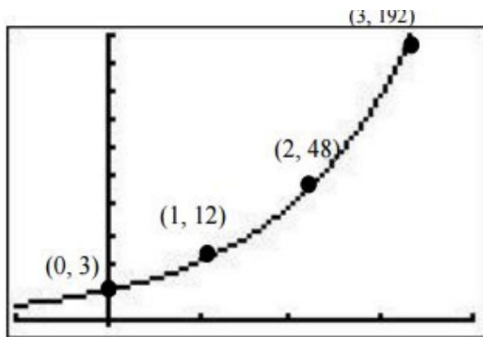


$a =$

$b =$

Equation: _____

5.

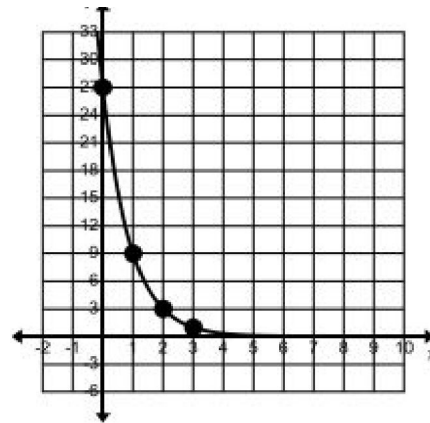


$a =$

$b =$

Equation: _____

6.



$a =$

$b =$

Equation: _____

6. Justin Bieber is going to clone himself (ew!). On day one, it's just Justin. But on day two, he clones himself so now there are two Beibers. On day three, both Beibers clone themselves for a total of four Beibers. He continues with this trend every day.

$a =$ $b =$

Equation: _____

7. OH NOOO!! Beyonce's instagram got hacked. She only has 3 followers now. BUT the BeeHive is getting her follow count back up. The number of followers triples every minute.

$a =$ $b =$

Equation: _____

8. Lady Gaga is having a concert. At the start of the concert, there are 400 people. GASP! The power goes out. So every twenty minutes, the number of people decreases by one-fourth.

$a =$ $b =$

Equation: _____

9. Dutch Bros started the day with 1000 cups of coffee. After one hour, a third of their coffee was gone. The trend continued for each hour after.

$a =$ $b =$

Equation: _____