Name: _____ Period: _____ Date: _____

Exponential Functions Bell Work

Find the f(x) given the value of x of the following function and draw the graph of the function.

$y = 2^{x-2}$

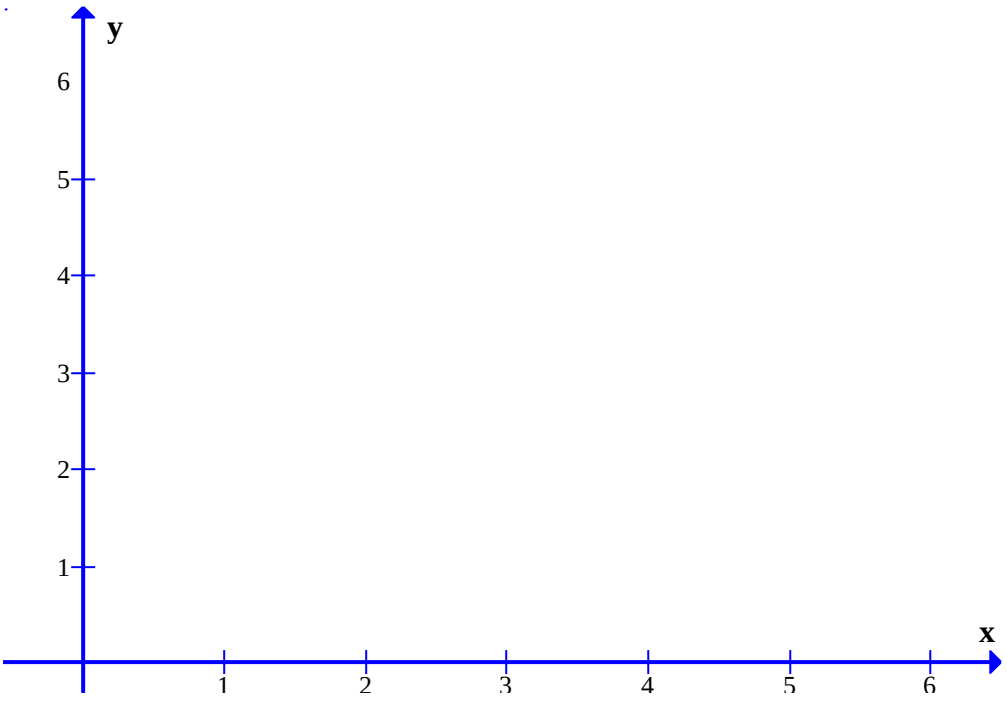
1. $x = 0$

2. $x = 1$

3. $x = 2$

4. $x = 3$

5. Graph $y = 2^{x-2}$



Name: _____ Period: _____ Date: _____

Exponential Functions Bell Work

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

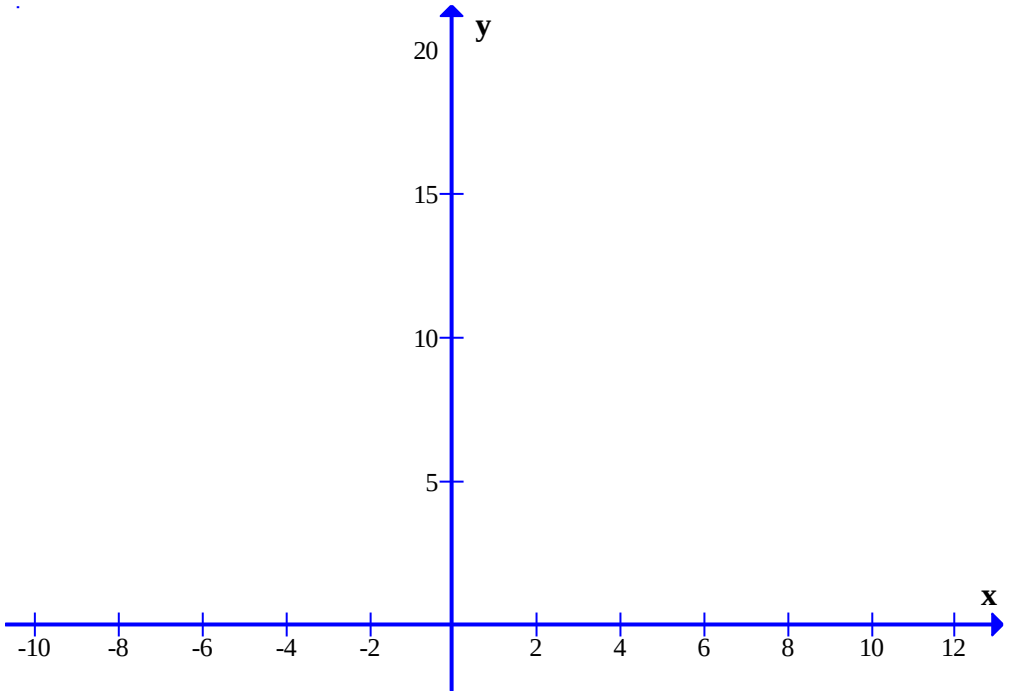
6. $x = -2$

7. $x = -1$

8. $x = 0$

9. $x = 1$

10. Graph $y = \left(\frac{1}{4}\right)^{2x+2}$



Name: _____ Period: _____ Date: _____

Exponential Functions Bell Work

Answer:

Find the f(x) given the value of x of the following function and draw the graph of the function.

$y = 2^{x-2}$

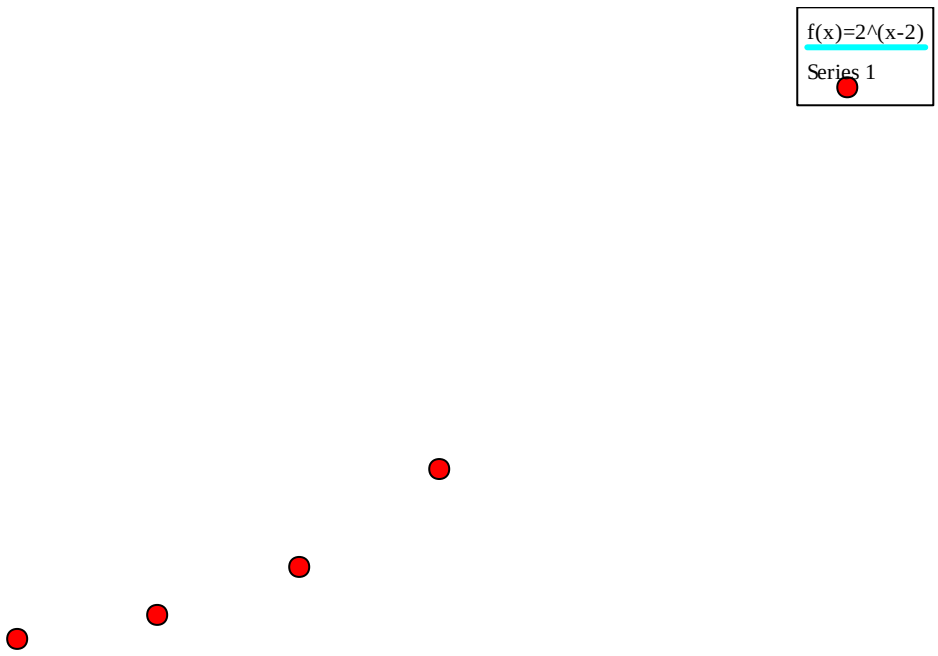
1. $x = 0$
Solution:
$y = 2^{0-2} = \frac{1}{2^2} = \frac{1}{4}$

2. $x = 1$
Solution:
$y = 2^{1-2} = \frac{1}{2}$

3. $x = 2$
Solution:
$y = 2^{2-2} = 1$

4. $x = 3$
Solution:
$y = 2^{3-2} = 2$

5. Graph $y = 2^{x-2}$



Name: _____ Period: _____ Date: _____

Exponential Functions Bell Work

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

6. $x = -2$

Solution:

$y = \left(\frac{1}{4}\right)^{2(-2)+2} = 4^2 = 16$

7. $x = -1$

Solution:

$y = \left(\frac{1}{4}\right)^{2(-1)+2} = 1$

8. $x = 0$

Solution:

$y = \left(\frac{1}{4}\right)^{2(0)+2} = \frac{1}{16}$

9. $x = 1$

Solution:

$y = \left(\frac{1}{4}\right)^{2(1)+2} = \frac{1}{256}$

10. Graph $y = \left(\frac{1}{4}\right)^{2x+2}$