Graphing Exponential Functions · 1

Write the equation of the exponential graph in the form $y = a(b)^x$.



Graphing Exponential Functions · 2

Find y when x = -1 for $y = 8(4)^x + 1$.

Graphing Exponential Functions · 3

What is the horizontal asymptote of the graph of $y = 6(\frac{1}{3})^x + 2$?

Graphing Exponential Functions · 4

Write the range of $y = 4(2)^x - 2$ as an inequality.

Graphing Exponential Functions · 5

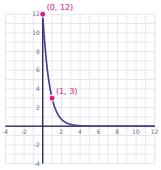
The graph of $y = (\frac{1}{3})^x$ is stretched vertically by a factor of 2 and then shifted 4 units up. Write the equation of the new graph.

Graphing Exponential Functions · 6

Find y when x = 2 for $y = 4(2)^x - 7$.

Graphing Exponential Functions · 7

Write the equation of the exponential graph in the form $y = a(b)^x$.



Graphing Exponential Functions · 8

Find y when x = -1 for $y = 4(4)^x + 4$.

Graphing Exponential Functions · 2

ANSWER

3

Graphing Exponential Functions · 1

ANSWER

$y = 2(4)^x$

Graphing Exponential Functions · 4

ANSWER

$y > -2$

Graphing Exponential Functions · 3

ANSWER

$y = 2$

Graphing Exponential Functions · 6

ANSWER

9

Graphing Exponential Functions · 5

ANSWER

$$y = 2\left(\frac{1}{3}\right)^x + 4$$

Graphing Exponential Functions · 8

ANSWER

5

Graphing Exponential Functions · 7

ANSWER

$$y = 12\left(\frac{1}{4}\right)^x$$

What is the horizontal asymptote of the graph of $y = 3(5)^x - 2$?

Write the range of $y = 6(4)^x - 8$ as an inequality.

The graph of $y = (\frac{1}{3})^x$ is stretched vertically by a factor of 5 and then shifted 5 units up. Write the equation of the new graph.

Find y when x = 3 for $y = 192(\frac{1}{4})^x - 4$.

Find y when x = -1 for $y = 3(3)^x - 3$.

What is the horizontal asymptote of the graph of $y = 2(\frac{1}{2})^x + 1$?

Write the range of $y = 5(3)^x - 4$ as an inequality.

The graph of $y = 2^x$ is stretched vertically by a factor of 2 and then shifted 1 unit down. Write the equation of the new graph.

Graphing Exponential Functions · 10

ANSWER

$y > -8$

Graphing Exponential Functions · 9

ANSWER

$y = -2$

Graphing Exponential Functions · 12

ANSWER

-1

Graphing Exponential Functions · 11

ANSWER

$y = 5\left(\frac{1}{3}\right)^x + 5$

Graphing Exponential Functions · 14

ANSWER

$y = 1$

Graphing Exponential Functions · 13

ANSWER

-2

Graphing Exponential Functions · 16

ANSWER

$y = 2(2)^x - 1$

Graphing Exponential Functions · 15

ANSWER

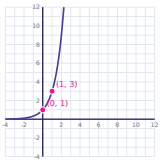
$y > -4$

Graphing Exponential Functions · 17

Find y when x = 4 for $y = 243(\frac{1}{3})^x + 6$.

Graphing Exponential Functions · 18

Write the equation of the exponential graph in the form $y = a(b)^x$.



Graphing Exponential Functions · 19

Find y when x = -1 for $y = 16(4)^x - 4$.

Graphing Exponential Functions · 20

What is the horizontal asymptote of the graph of $y = 2^x + 6$?

Graphing Exponential Functions · 21

Write the range of $y = 3(2)^x + 1$ as an inequality.

Graphing Exponential Functions · 22

The graph of $y = (\frac{1}{4})^x$ is stretched vertically by a factor of 4 and then shifted 7 units down. Write the equation of the new graph.

Graphing Exponential Functions · 23

Find y when x = 4 for $y = 5(3)^x + 5$.

Graphing Exponential Functions · 24

Write the equation of the exponential graph in the form $y = a(b)^x$.



Graphing Exponential Functions · 18

ANSWER

$y = 3^x$

Graphing Exponential Functions · 17

ANSWER

9

Graphing Exponential Functions · 20

ANSWER

$y = 6$

Graphing Exponential Functions · 19

ANSWER

0

Graphing Exponential Functions · 22

ANSWER

$y = 4\left(\frac{1}{4}\right)^x - 7$

Graphing Exponential Functions · 21

ANSWER

$y > 1$

Graphing Exponential Functions · 24

ANSWER

$y = 4(2)^x$

Graphing Exponential Functions · 23

ANSWER

410