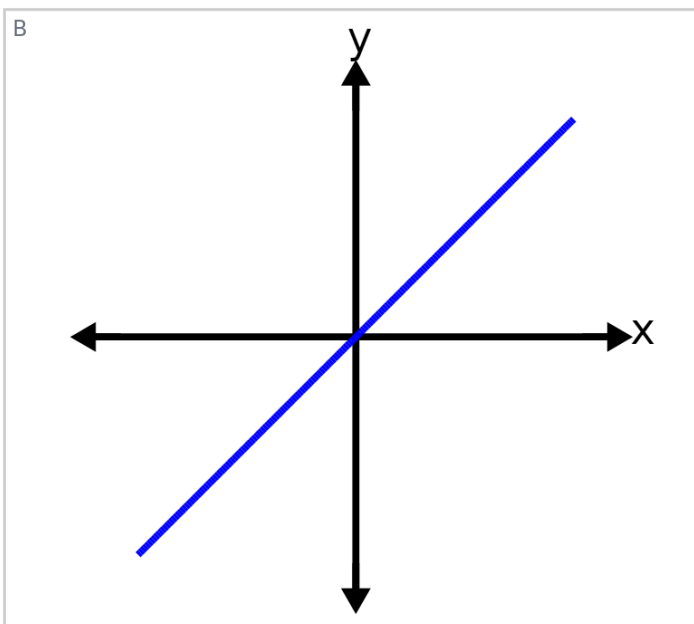
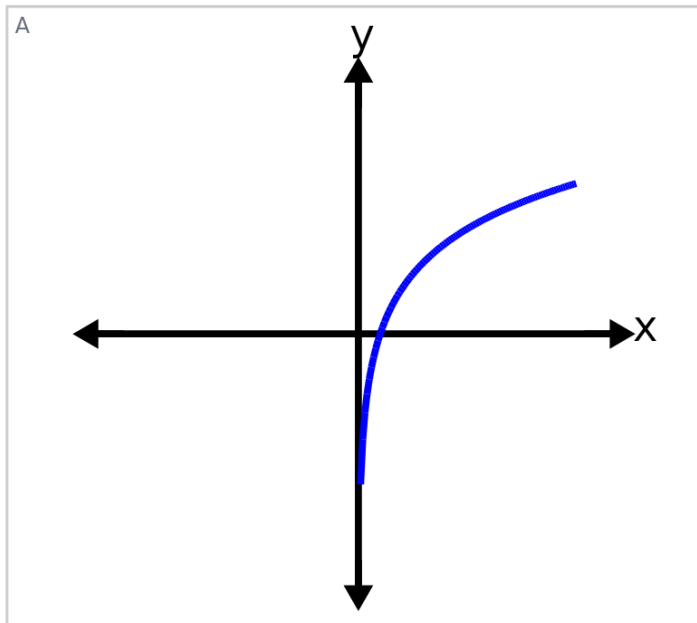




Graph exponential functions using transformations

1 Which graph would this formula create?

$$y = mx + b$$



2 Using the mapping notation, how does this variable value transform the graph of f ?

A horizontally stretch by a factor of 3

B shift left by 3

C vertically stretch by a factor of 3

D horizontally compress by a factor of 3

3 How is the graph of f transformed to produce g ?

A vertically stretch by a factor of 2 and horizontally stretch by a factor of 3

B vertically stretch by a factor of 2 and shift up by 3

C horizontally stretch by a factor of 2 and horizontally stretch by a factor of 3

D vertically compress by a factor of 2 and shift up by 3

4 Which function applies these transformations to f ?

A

$$g(x) = 4f(x) - 2$$

B

$$g(x) = 2f(x) + 4$$

5 How is the graph of f transformed to produce g ?

A shift left by 2 and shift down by 4

B vertically compress by a factor of 2 and horizontally compress by a factor of 4

C vertically stretch by a factor of 2 and reflect over the x-axis

D vertically stretch by a factor of 2 and horizontally compress by a factor of 4



Graph exponential functions using transformations

6 Which function applies these transformations to f ?

A

$$g(x) = f(x + 3) - 2$$

B

$$g(x) = f(x - 2) + 3$$

7 How is the graph of f transformed to produce g ?

A

reflect over the x -axis and reflect over the x -axis

B

vertically stretch by a factor of 3 and vertically stretch by a factor of 2

C

shift down by 3 and shift right by 2

D

shift down by 3 and vertically stretch by a factor of 2

8 Which function applies these transformations to f ?

A

$$g(x) = f(3x) - 2$$

B

$$g(x) = f(2x) + 3$$