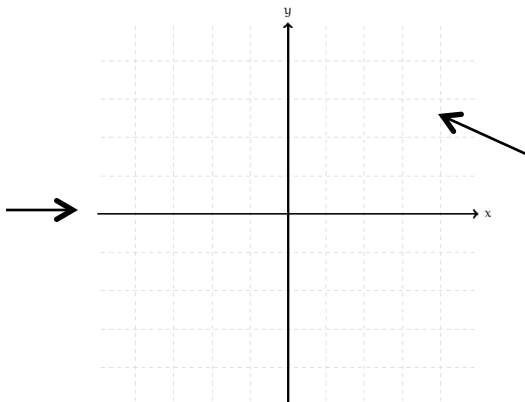


7.1 Graph Exponential Growth Functions Notes

An **exponential function** has the form _____ where $a \neq 0$ and the base b is a positive number other than 1.

If _____ and _____, then the function _____ is an *exponential growth function*, and _____ is called the growth factor.

The function _____, where _____, is the *parent function* for the family of exponential growth functions with base b .

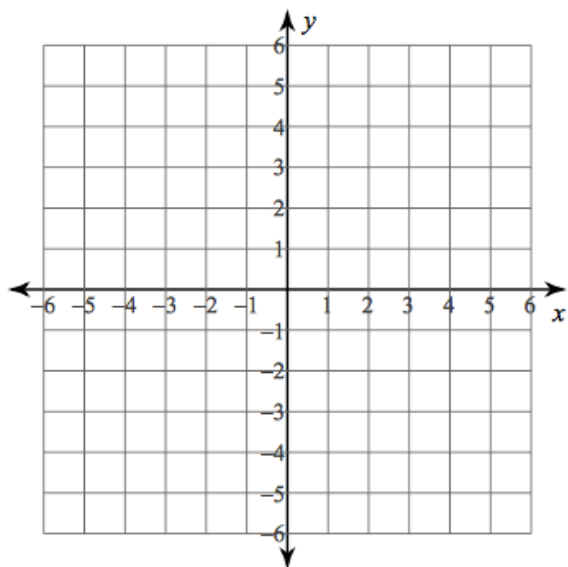


Domain: _____

Range: _____

Asymptote: _____

1) Graph $y = 2^x$

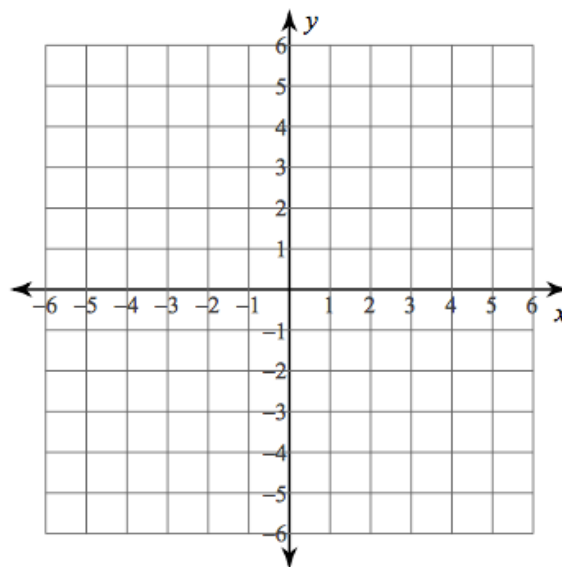


Domain: _____

Range: _____

Asymptote: _____

2) Graph $y = \frac{1}{2} \cdot 4^x$

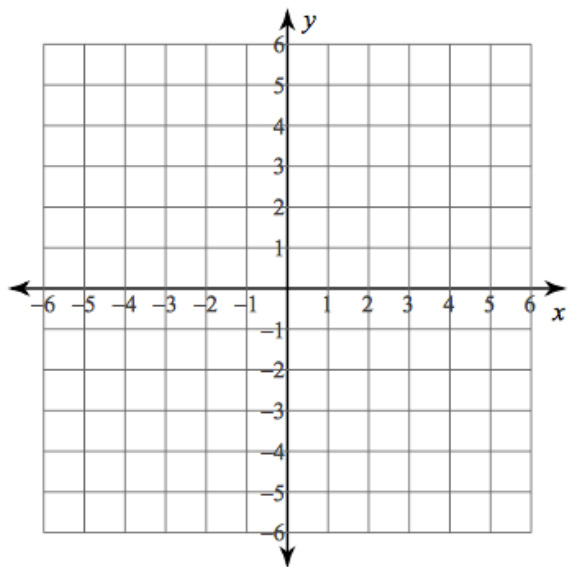


Domain: _____

Range: _____

Asymptote: _____

3) Graph $y = -\left(\frac{5}{2}\right)^x$



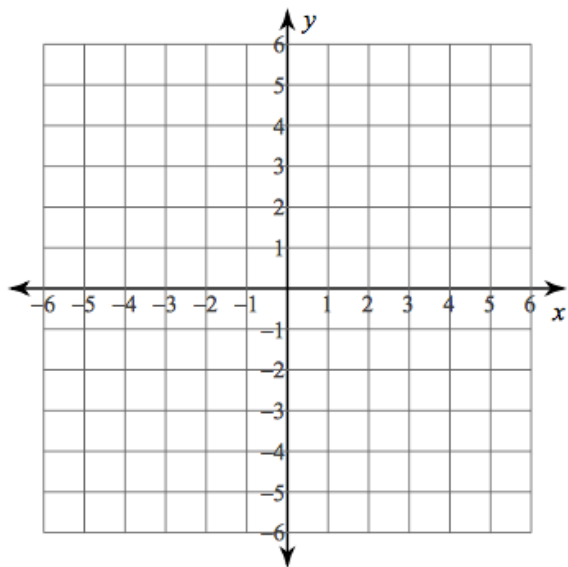
Domain: _____

Range: _____

Asymptote: _____

Translations: The graph $y = ab^x$ can be translated to $y = ab^{x-h} + k$ by moving _____ units horizontally and _____ units vertically.

4) Graph $y = 4 \cdot 2^{x-1} - 3$

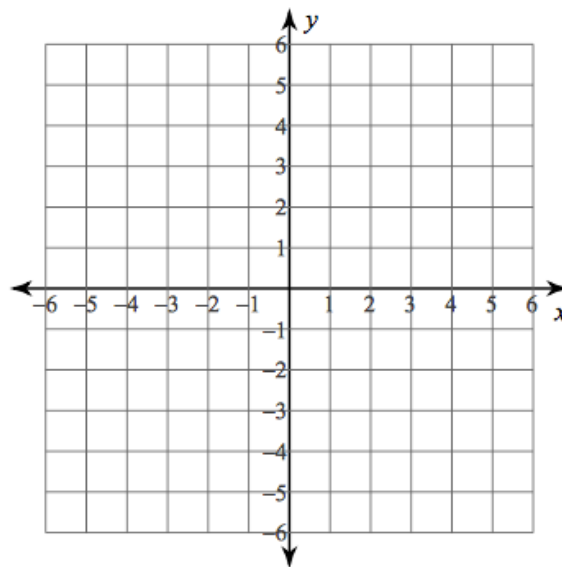


Domain: _____

Range: _____

Asymptote: _____

5) Graph $y = 3^{x+1} + 2$



Domain: _____

Range: _____

Asymptote: _____