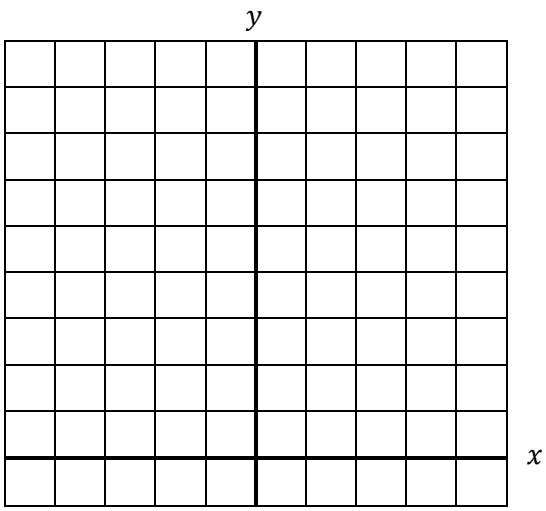
DATE:_____

Graphing Exponential Functions

Calculator

1. Graph the function and label all key parts:

$$f(x) = 6\left(\frac{1}{2}\right)^x$$



Identify the asymptote:

Identify the *y*-intercept:

Identify the *x*-intercept:

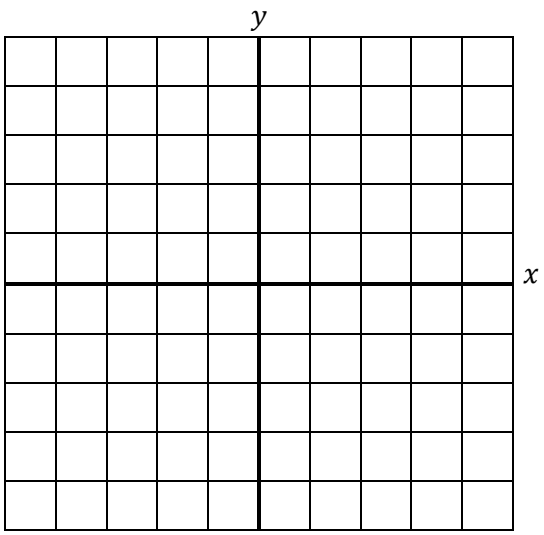
Domain:

Range:

Describe the transformation(s):

2. Graph the function and label all key parts:

$$f(x) = e^{x+1} - 4$$



Identify the asymptote:

Identify the *y*-intercept:

Identify the *x*-intercept:

Domain:

Range:

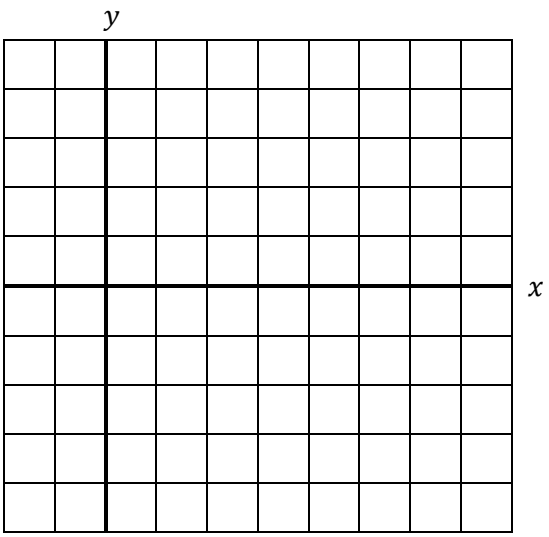
Describe the transformations:

Graphing Logarithmic Functions

Non-Calculator

3. Graph the function and label all key parts:

$$g(x) = \log_3(x - 3)$$



Identify the asymptote:

Identify the *y*-intercept:

Identify the *x*-intercept:

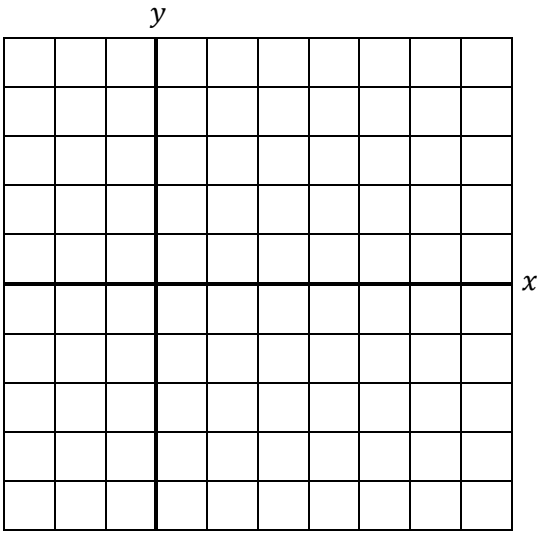
Domain:

Range:

Describe the transformation(s):

4. Graph the function and label all key parts:

$$g(x) = \log_3(x + 3) - 2$$



Identify the asymptote:

Identify the *y*-intercept:

Identify the *x*-intercept:

Domain:

Range:

Describe the transformations: