Name of Graph: _____

Key Features

Equation: _____

x	$f(x)$
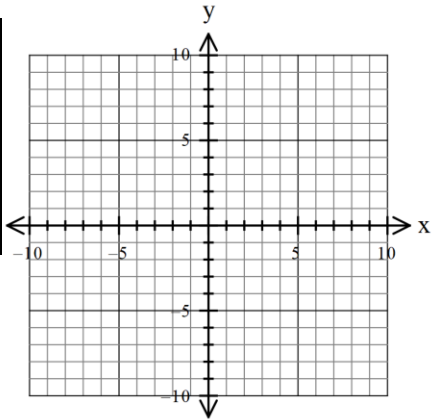
Domain: Positive:

Range: Negative:

x-intercept(s):   Maximums /Minimums

y-intercept: Symmetry:

Increasing: End Behavior:

Decreasing: $$\lim_{x \to -\infty} f(x) =$$

Constant: $$\lim_{x \to \infty} f(x) =$$

Common log:

Natural log:

Asymptote: _____

Transformation general equation:

How to find domain:

Inverse function:

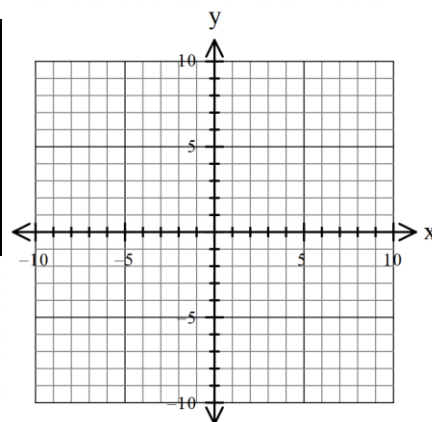# Steps for solving a logarithmic equation:

EX. $12 = -\log_3(x - 4) + 3$

1. get the log by itself (you may need to use log properties to do this)

2. do inverse of logarithm (write an exponential using "swirl")

3. solve for variable (round to the nearest ten-thousandth is typical)

4. Check restrictions and for extraneous answers

EX. $\log_3(x - 4) - \log_3 x = \log_3 60$

EX. $\log_6(x - 5) + \log_6(x) = 1$