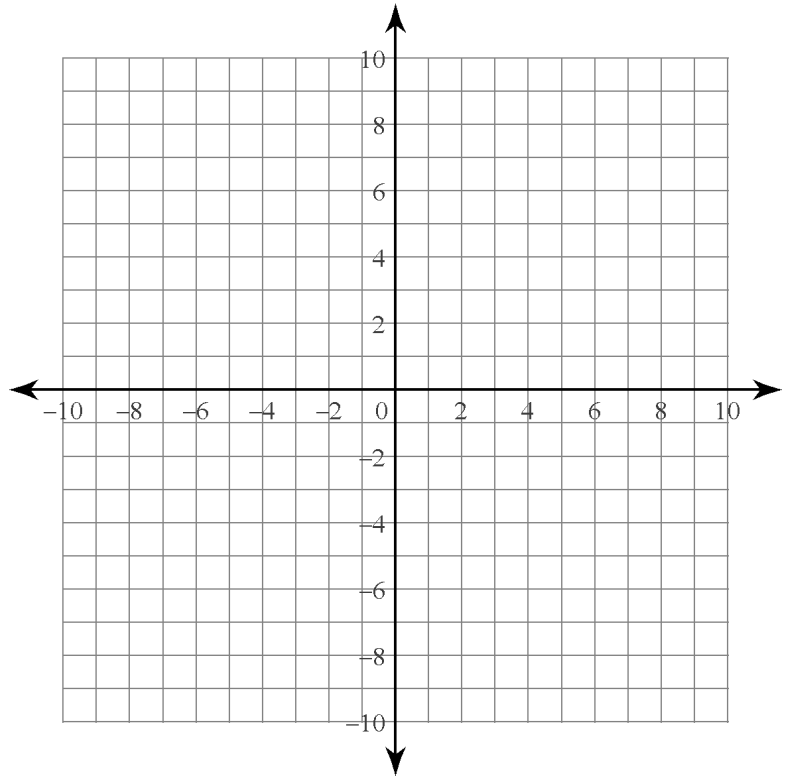


### 8.3 Logarithmic Functions

$$y = \log_2 x$$

$$y = \log_4 x$$

$$y = \log_{\frac{1}{2}} x$$



Domain –

Range –

$x$ -intercept –

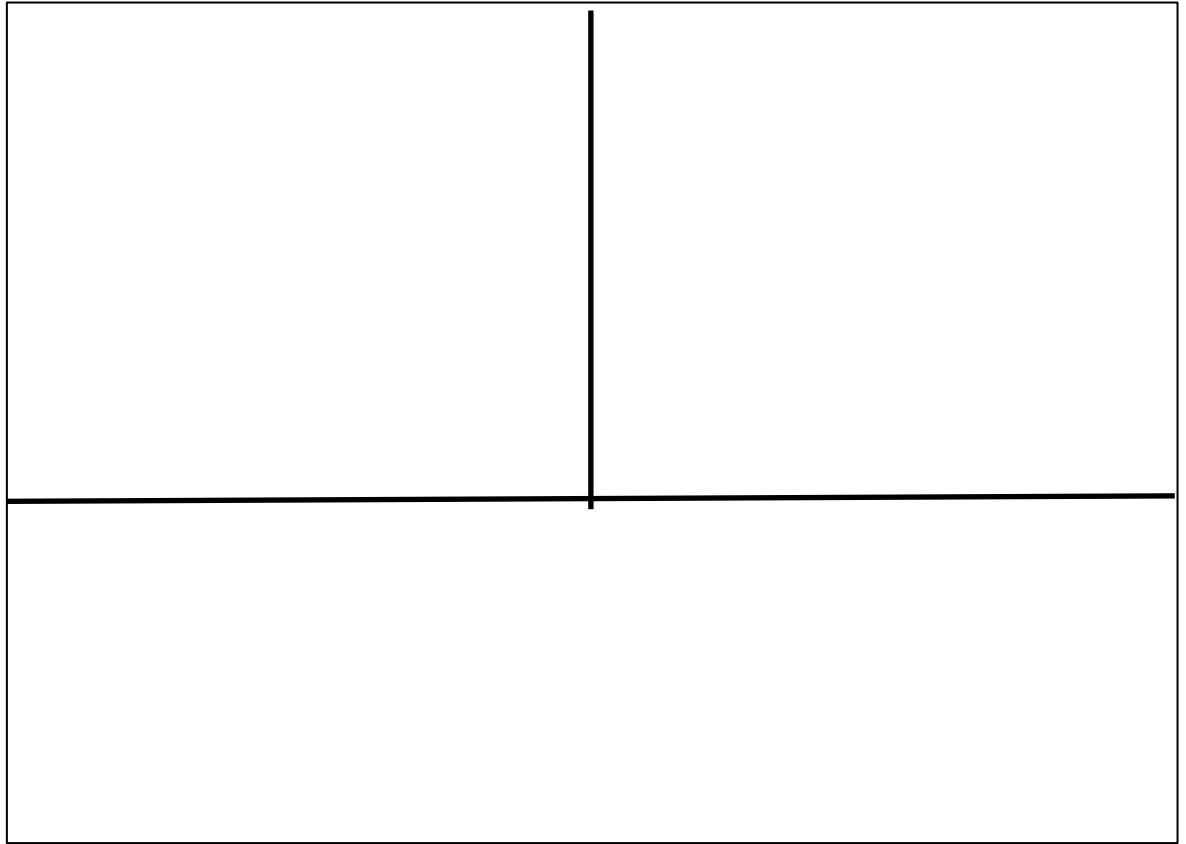
$y$  – intercept –

asymptote –

end behaviour –

**Common Logarithms –**

**Natural Logarithms –**



Find the domain of the function  $f(x) = \log(x - 3)$  and sketch its graph.

Solve the equation  $e^{3-2x} = 4$

Find  $\lim_{x \rightarrow 2^-} \ln(4 - x^2)$