


# Reciprocal Graph

A common form of a reciprocal graph is:

$$y = \frac{c}{x} \quad \text{or} \quad xy = c$$

*(Note: In the original image, a box around 'c' in the first equation is labeled 'c is a constant' with an arrow pointing to it.)*

This form of reciprocal graph is a smooth curve called a hyperbola. It has two branches.

 **Example**  $y = \frac{1}{x}$

Here, the curve gets very close to the  $x$  and  $y$  axes but never touches them.

This means that the  $x$  and  $y$  axes are **asymptotes** to the curve.

