RECIPROCAL FUNCTIONS

STUDENT RESOURCE

Set your graph plotter to square axes, ie so that **y = x** looks as if it is at **45°** to the axes

- Draw the graphs of $y = \frac{1}{x}$ and $y = -\frac{1}{x}$ and describe what you see.

- Draw the graphs of $y = \frac{1}{x}$ and $y = \frac{2}{x}$ and describe what you see.

  Make up some of your own like this and watch the effect of changing the constant.

- Draw the graph of $y = \frac{1}{x}$ and $y = \frac{1}{2x}$ and describe what you see.

  Make up some of your own like this and watch the effect of changing the constant.

- Draw the graphs of $y = \frac{1}{x}$ and $y = \frac{1}{x} + 3$

  Make up some of your own like this and watch the effect of changing the constant.

- Draw the graphs of $y = \frac{1}{x}$ and $y = \frac{1}{x+3}$

  Make up some of your own like this and watch the effect of changing the constant.

Challenge

Recreate this image.
Make up one like this for someone to re-create.