**Graphing Reciprocals of Linear Functions**

Sketch each pair of functions on the same graph (use different colours if possible). You may want to make a table of values to help you:

1) $y=x$
 $y=\frac{1}{x}$

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| X | -5 | -2 | -1 | -0.5 | -0.2 | -0.1 | 0 | 0.1 | 0.2 | 0.5 | 1 | 2 | 5 |
| $$y= \frac{1}{x}$$ |  |  |  |  |  |  |  |  |  |  |  |  |  |

2) $y=2x-6$
 $y= \frac{1}{2x-6}$



|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $$y= \frac{1}{2x-6}$$ |  |  |  |  |  |  |  |  |  |  |  |  |  |