Function y= $\frac{3}{x-1}$

Given: y= $\frac{3}{x-1}$, x ≠ 1

Draw the diagram

General ⟶ y = $\frac{u}{v}$ | $y^{I}=\frac{0-3.(1)}{(x-1)^2}=\frac{-3}{(x-1)^2}<0$

(slope) $y^{I}=\frac{u^{I}v-uv^{I}}{v^2}$ | The function y = $\frac{3}{x-1}$

Decrease

When x> 1 , y > 0

When x < 1 , y < 0