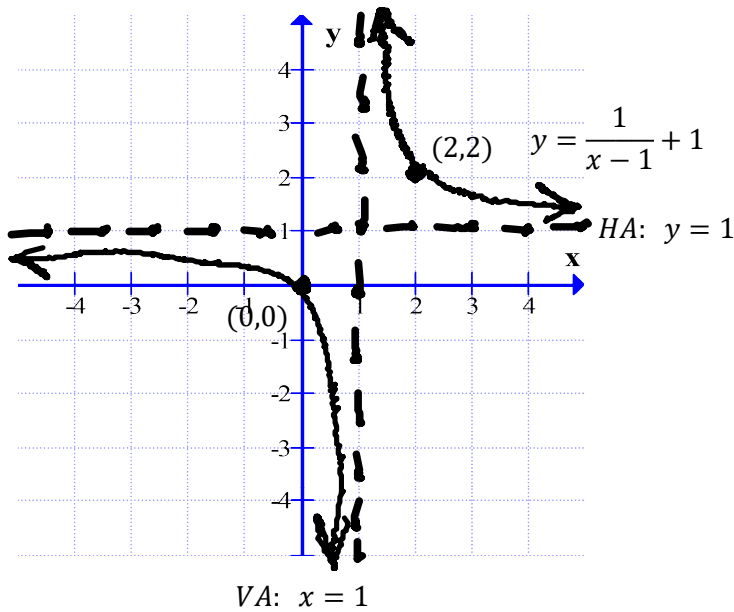


C12 - 9.2 - Graph HT VT Add Fractions Long Div Notes



$$\frac{1}{x-1} + 1 = \frac{1}{x-1} + 1 \times \frac{x-1}{x-1} = \frac{1 + x - 1}{x-1} = \frac{x}{x-1}$$

$$y = \frac{x}{x-1} \quad \frac{x}{x-1} = \frac{1}{x-1} + 1$$

$x - int:$

$$y = \frac{1}{x-1} + 1$$

$$0 = \frac{1}{x-1} + 1$$

$$-1 = \frac{1}{x-1}$$

$$(x-1) \times -1 = \frac{1}{x-1} \times (x-1)$$

$$-x + 1 = 1$$

$$x = 0$$

Careful!

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

$$0 = \frac{x}{x-1}$$

$$(x-1) \times 0 = \frac{x}{x-1} \times (x-1)$$

$$0 = x$$

$$x = 0$$

$y - int:$

$$y = \frac{1}{x-1} + 1$$

$$y = \frac{1}{0-1} + 1$$

$$y = -1 + 1$$

$$y = 0$$

$(0,0)$

$(0,0)$

x	y
0	0
1	und
2	2