Propiedad a utilizar:

$$\log_b MN = \log_b M + \log_b M$$

Ejercicio:

$$\log_2 3 + \log_2 x = \log_2 5 + \log_2(x-2)$$

$$\log_2(3.X) = \log_2(5(x-2))$$

$$3x = 5x - 10$$

$$3x - 5x = -10$$

$$x = \frac{-10}{-2}$$

$$\boldsymbol{x = 5}$$

UTILIZAMOS :

$$\log_b N = X \quad \Rightarrow \quad b^X = N$$

$$\log_3(x-6) - \log_3(2x-1) = 0$$

$$\log_3 \frac{x-6}{2x-1} = 0$$

$$3^0 = \frac{x-6}{2x-1}$$

$$(2x-1)1 = x + 6$$

$$2x - 1 = x + 6$$

$$2x - x = 6 + 1$$

$$\boldsymbol{x = 7}$$