

$$2 \log \sqrt{3x-1} - \log \sqrt{2x-3} = 1 - \log 5$$

$$\log \sqrt{3x-1}^2 - \log \sqrt{2x-3} = \log 10 - \log 5$$

$$\log \frac{3x-1}{\sqrt{2x-3}} = \log 2$$

$$\frac{3x-1}{\sqrt{2x-3}} = 2$$

$$(3x-1)^2 = (2\sqrt{2x-3})^2$$

$$9x^2 - 6x + 1 = 4(2x-3)$$

$$9x^2 - 6x + 1 = 8x - 12$$

$$9x^2 - 14x + 13 = 0$$

$$x = \frac{-(-14) \pm \sqrt{(-14)^2 - 4 \cdot 9 \cdot 13}}{2 \cdot 9} = \text{NO TIENE SOLUCIÓN REAL}$$