

Méthode 1

$$\begin{aligned} \frac{x-3}{12} &= \frac{3x-1}{10} \\ \text{mem}(12,10) &= 60 \\ \frac{5(x-3)}{60} &= \frac{6(3x-1)}{60} \\ \frac{5x-15}{60} &= \frac{18x-6}{60} \\ 5x-15 &= 18x-6 \\ +6 & \\ 5x-9 &= 18x \\ -5x & \\ -9 &= 13x \\ \boxed{\frac{-9}{13} = x} \end{aligned}$$

Méthode 2

$$\begin{aligned} \frac{x-3}{12} &= \frac{3x-1}{10} \\ (x-3):12 &= (3x-1):10 \\ \frac{x}{12} - \frac{3}{12} &= \frac{3x}{10} - \frac{1}{10} \\ -\frac{x}{12} & \\ +\frac{1}{10} & \\ \frac{-15}{60} + \frac{6}{60} &= \frac{18x}{60} - \frac{5x}{60} \\ \frac{-9}{60} &= \frac{13x}{60} \\ -9 &= 13x \\ \boxed{\frac{-9}{13} = x} \end{aligned}$$

Méthode 3

$$\begin{aligned} \frac{x-3}{12} &= \frac{3x-1}{10} \\ \cdot 12 & \\ x-3 &= \frac{(3x-1) \cdot 12}{10} \\ x-3 &= \frac{36x-12}{10} \\ 10(x-3) &= 36x-12 \\ 10x-30 &= 36x-12 \\ -30 &= 26x-12 \\ +12 & \\ -18 &= 26x \\ \frac{-18}{26} &= x \\ \boxed{\frac{-9}{13} = x} \end{aligned}$$

$$\frac{x+6}{3} + \frac{4(2x-4)}{15} = \frac{6-4x}{5}$$

$$\frac{5(x+6)}{15} + \frac{4(2x-4)}{15} = \frac{3(6-4x)}{15}$$

$$\frac{5x+30}{15} + \frac{8x-16}{15} = \frac{18-12x}{15}$$

$$5x+30+8x-16 = 18-12x$$

lcm (3, 5, 15)
= 15

lcm

~~lcm~~

~~lcm~~