

$$\textcircled{1} \frac{9x+2}{6x-2} = \frac{5x}{2x+1}$$

$$\text{या, } 30x^2 - 10x = 18x^2 + 4x + 9x + 2$$

$$\text{या, } 30x^2 - 18x^2 - 10x - 4x - 9x + 2 = 0$$

$$\text{या, } 12x^2 - 23x + 2 = 0$$

$$\text{या, } 12x^2 - (24-1)x + 2 = 0$$

$$\text{या, } 12x^2 - 24x + x + 2 = 0$$

$$\text{या, } 12x(x-2) + 1(x-2) = 0$$

$$\text{या, } (x-2)(12x+1) = 0$$

$$x = 2 \quad \left| \quad \begin{array}{l} 12x+1=0 \\ 12x^2-1 \end{array} \right.$$

$$x = -\frac{1}{12}$$

... ..

$$\textcircled{9} \quad \begin{array}{r} 2x + 3y = 28 \quad \text{---} \textcircled{i} \times 3 \\ 3x - 2y = 3 \quad \text{---} \textcircled{ii} \times 2 \end{array}$$

$$\begin{array}{r} 6x + 9y = 84 \\ + 6x - 4y = +6 \\ \hline + \quad + \quad - \end{array}$$

$$13y = 78$$

$$y = \frac{78}{13} = 6$$

$$y = 6$$

\textcircled{ii} ને અભિયોગ્ય રીતે વાપરો

$$3x - 2y = 3$$

$$\text{અ, } 3x - 2 \cdot 6 = 3$$

$$\text{અ, } 3x - 12 = 3$$

$$\text{અ, } 3x = 3 + 12$$

$$\text{અ, } 3x = 15$$

$$\text{અ, } x = \frac{15}{3} = 5$$

$$\text{અ, } x = 5$$

$$\begin{aligned} 4x - 3y &= 14 & \text{--- (i) } \times 7 \\ 7x + 8y &= 51 & \text{--- (ii) } \times 4 \end{aligned}$$

$$\begin{array}{r} 28x - 21y = 98 \\ -28x + 32y = 204 \\ \hline 53y = 106 \end{array}$$

$$y = \frac{106}{53} \times 2$$

$$y = 2$$

① ને સહાયતા કરવા માટે

$$\begin{aligned} 4x - 3y &= 14 \\ \text{તેથી, } 4x - 3 \cdot 2 &= 14 \\ \text{તેથી, } 4x - 6 &= 14 \\ \text{તેથી, } 4x &= 14 + 6 \\ \text{તેથી, } 4x &= 20 \\ \text{તેથી, } x &= \frac{20}{4} \times 5 \\ \text{તેથી, } x &= 5 \end{aligned}$$

$$\textcircled{A} \quad \frac{x}{3} - \frac{x}{4} = 1 - \frac{x}{6}$$

$$\text{તેથી, } \frac{4x - 3x}{12} = \frac{6 - x}{6}$$

$$\text{તેથી, } \frac{x}{12} = \frac{6 - x}{6}$$

$$\text{તેથી, } 6x = 72 - 12x$$

$$\text{તેથી, } 6x + 12x = 72$$

$$\text{તેથી, } 18x = 72$$

$$\text{તેથી, } x = \frac{72}{18} \times 4$$

$$\text{તેથી, } x = 4$$

$$\begin{aligned} 5x + 17y &= 61 & \text{--- (i) } \times 3 \\ 3x + 2y &= 0 & \text{--- (ii) } \times 5 \end{aligned}$$

$$\begin{array}{r} 15x + 51y = 183 \\ -15x - 10y = 0 \\ \hline 61y = 183 \end{array}$$

$$y = \frac{183}{61}$$

$$y = 3$$

$$\textcircled{B} \quad 5x + 17y = 61$$

$$5x + 17 \cdot 3 = 61$$

$$5x + 51 = 61$$

$$5x = 61 - 51$$

$$5x = 10$$

$$x = \frac{10}{5} \times 2$$

$$x = 2$$