

(A) $\frac{1}{3}(2x-5) = 12$

$\frac{1}{3}(2x-5) = 12(3)$

$2x-5 = 36$

$\frac{2x}{2} = \frac{41}{2}$

$x = \frac{41}{2}$

(2) $\frac{2}{5}(4x-3) = 10(5)$

$8x-6 = 50$

$\frac{8x}{8} = \frac{56}{8}$

$x = 7$

$$(3) \quad (20) \quad \frac{(2x+1)}{5} = \frac{(3x+2)(20)}{4}$$

$$\frac{40x}{5} + \frac{20}{5} = \frac{60x}{4} + \frac{40}{4}$$

$$\cancel{8x} + 4 = 15x + 10$$

$$\begin{array}{r} 4 = 7x + 10 \\ -10 \quad -10 \\ \hline -6 = 7x \\ \frac{-6}{7} = \frac{7x}{7} \quad (x = -\frac{6}{7}) \end{array}$$

$$(20) \quad \frac{(2x+1)}{5} = \frac{(3x+2)(20)}{4}$$

$$8x + 4 = 15x + 10$$

$$\frac{2x+1}{5} = \frac{(3x+2)}{4}$$

$$15x + 10 = 8x + 4$$

$$\frac{(-2x+10)}{6} = \frac{(4x+1)}{3}$$

$$24x + 6 = -8x + 30$$

$$\begin{array}{r} 24x + 6 = -8x + 30 \\ +6x \quad +6x \\ \hline 30x + 6 = 30 \\ -6 \quad -6 \\ \hline 30x = 24 \\ \frac{30x}{30} = \frac{24}{30} \end{array}$$

$$x = \frac{24}{30}$$

Special Solutions

Notes

①

$$\boxed{4x + 6 = 4x + 10}$$
$$\begin{array}{r} -6 \qquad -6 \\ \hline \end{array}$$

$$\begin{array}{r} 4x = 4x + 4 \\ -4x \quad -4x \\ \hline \end{array}$$

$$0 \neq 4 \text{ False}$$

NO SOLUTION

$$\boxed{4x + 10 = 4x + 10}$$

$$\textcircled{2} \quad \begin{array}{r} 4x + 10 = 4x + 10 \\ -10 \quad -10 \\ \hline \end{array}$$

$$\begin{array}{r} 4x = 4x \\ -4x \quad -4x \\ \hline \end{array}$$

$$0 = 0 \text{ TRUE}$$

IDENTITY

Infinite # of Solutions