

$$1.) \begin{array}{r} x + 4 = 12 \\ -4 \quad -4 \end{array}$$

$$\boxed{x = 8}$$

$$2.) \begin{array}{r} x - 9 = 23 \\ +9 \quad +9 \end{array}$$

$$\boxed{x = 32}$$

$$3.) 7\left(\frac{x}{7}\right) = (3)7$$

$$\boxed{x = 21}$$

$$4.) \frac{9x}{9} = \frac{45}{9}$$

$$\boxed{x = 5}$$

$$1.) \begin{array}{r} 3x - 4 = 8 \\ +4 \quad +4 \end{array}$$

$$\frac{3x}{3} = \frac{12}{3}$$

$$\boxed{x = 4}$$

$$2.) \frac{x}{4} + 3 = 10$$

$$4\left(\frac{x}{4}\right) = (7)4$$

$$\boxed{x = 28}$$

$$3.) \begin{array}{r} 4a + 1 = 13 \\ -1 \quad -1 \end{array}$$

$$\frac{4a}{4} = \frac{12}{4}$$

$$\boxed{a = 3}$$

$$4.) \begin{array}{r} \frac{x}{2} - 3 = 5 \\ +3 \quad +3 \end{array}$$

$$2\left(\frac{x}{2}\right) = (8)2$$

$$\boxed{x = 16}$$

$$5.) \begin{array}{r} \star + \boxed{\ominus} \boxed{\ominus} = \triangle \\ 1 \quad 4a \quad 13 \end{array}$$

Solve for  $\ominus$

$$\star + \boxed{\ominus} \boxed{\ominus} = \triangle$$

$$-\star$$

$$\frac{\boxed{\ominus} \boxed{\ominus}}{\boxed{\ominus}} = \frac{\triangle - \star}{\boxed{\ominus}}$$

$$\boxed{\ominus} = \frac{\triangle - \star}{\boxed{\ominus}}$$

$$3a + 5 - x + 7x - 2a$$

"simplify"  
"combine like terms"

$$3a - 2a = a$$

$$-x + 7x = 6x$$
$$-1 + 7 = 6$$

$$a + 6x + 5$$

$$1.) 2x - 5 + 3a - 5x + 10a$$

$$2x - 5x = -3x$$

$$3a + 10a = 13a$$

$$-3x - 5 + 13a$$

$$13a - 3x - 5$$

$$2.) 7b - b - x + 5 - 2x - 7b$$

$$\cancel{7b} + (-b) + \cancel{(-7b)} = -b$$

$$-x + (-2x) = -3x$$

$$-b - 3x + 5$$

$$-4x + 3(2x - 5) = 31$$

$$-4x + 6x - 15 = 31$$

$$\begin{array}{r} 2x - 15 = 31 \\ +15 \quad +15 \end{array}$$

$$\frac{2x}{2} = \frac{46}{2}$$

$$\boxed{x = 23}$$

1.) Distribute (slap)

2.) Be racist

"combine like terms"

3.) 2-step solve

$$1.) \quad 13 + 2(5c - 2) = 29$$

$$\boxed{13} + 10c - \boxed{4} = 29$$

$$\Rightarrow 10c + 9 = 29$$
$$\begin{array}{r} -9 \quad -9 \end{array}$$

$$\frac{10c}{10} = \frac{20}{10}$$

$$\boxed{c = 2}$$

$$2.) \quad 5(t - 3) - 2t = -30$$

$$\boxed{5t} - 15 - \boxed{2t} = -30$$

$$3t - 15 = -30$$
$$\begin{array}{r} +15 \quad +15 \end{array}$$

$$\frac{3t}{3} = \frac{-15}{3}$$

$$\boxed{t = -5}$$

$$5t - 2t = 3t$$

$$\cancel{4t} + \cancel{t} + t + t + t + \cancel{t} + \cancel{t}$$

$$3.) \quad \frac{2}{5}(5k + 35) - 8 = 12$$

$$\frac{2}{5}\left(\frac{5k}{1}\right) = \frac{10k}{5} = 2k$$

$$\frac{2}{5}\left(\frac{5k}{1}\right) + \frac{2}{5}\left(\frac{35}{1}\right) - 8 = 12$$

$$\frac{2}{5}\left(\frac{35}{1}\right) = \frac{70}{5} = 14$$

$$2k + 14 - 8 = 12$$

$$\Rightarrow 2k + 6 = 12$$

$$\frac{2k}{2} = \frac{6}{2}$$

$$\boxed{k = 3}$$

$$\boxed{12} \left( \frac{3}{4} - \frac{1}{3} \right) = \frac{1}{4} \quad | \cdot 12$$

$$\frac{36}{4} - \frac{12}{3} = \frac{12}{4}$$

$$9 - 4x = 3$$

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

$$x = \frac{6}{4} = \boxed{\frac{3}{2}}$$

Multiply by

LCM

lowest common multiple