

Eg 1) Solve for x and y

$$3x + y = 9$$

$$\frac{x}{2} - y = -2 \quad \text{Get rid of the fraction}$$

$$\Rightarrow x - 2y = -4$$

multiply

$$\begin{cases} 3x + y = 9 \quad (2) \\ x - 2y = -4 \end{cases}$$
 simultaneous equations

$$\Rightarrow \begin{array}{r} 6x + 2y = 18 \\ x - 2y = -4 \\ \hline 7x = 14 \\ \therefore x = 2 \end{array} \quad \begin{array}{l} 3x + y = 9 \quad x = 2 \\ 3(2) + y = 9 \\ 6 + y = 9 \\ -6 \quad y = 3 \quad | -6 \end{array}$$

Q20) $3x + y = 27$

$$\frac{x}{2} - y = 1 \quad \text{LCD} = 2$$

$$x - 2y = 2$$

$$3x + y = 27 \quad (2)$$

$$x - 2y = 2$$

$$6x + 2y = 54$$

$$\therefore \begin{array}{r} 7x = 56 \\ \therefore x = 8 \end{array} \quad | \div 7$$

$$x - 2y = 2 \quad x = 8$$

$$(8) - 2y = 2$$

$$\begin{array}{r} -8 \quad -2y = -6 \quad | -8 \\ \therefore -2 \quad y = 3 \quad | \div -2 \end{array}$$

Q21) $2x - 3y = 24$

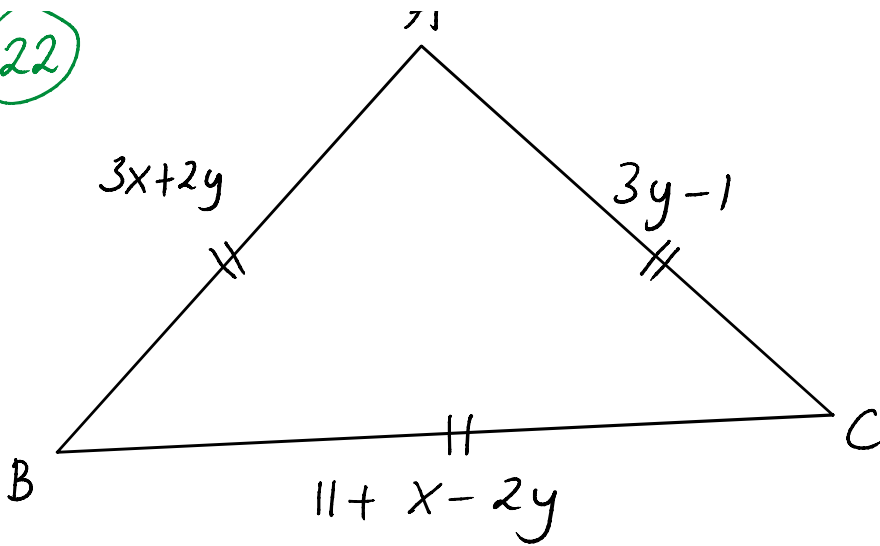
$$\frac{5x}{3} - \frac{y}{2} = 12$$

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A

Find x and y

(22)



Find x and y
and the length
of the side.