

$$\textcircled{4} \quad 2x - \cancel{9} = 3$$

$$\begin{array}{l|l} +\cancel{9} & 2x = 12 \\ \hline \div 2 & 1x = 6 \end{array} \quad \begin{array}{l|l} +9 & \\ \hline \div 2 & \end{array}$$

$$\textcircled{5} \quad 2x - \cancel{7} = 5$$

$$\begin{array}{l|l} +\cancel{7} & 2x = 12 \\ \hline \div 2 & 1x = 6 \end{array} \quad \begin{array}{l|l} +7 & \\ \hline \div 2 & \end{array}$$

X parts = numbers.

$$\textcircled{6} \quad \cancel{3} + 2x = 11$$

$$\begin{array}{l|l} -\cancel{3} & 2x = 8 \\ \hline \div 2 & 1x = 4 \end{array} \quad \begin{array}{l|l} -3 & \\ \hline \div 2 & \end{array}$$

$$Q10) \quad 7x - 9 = 3x + 11$$

$x = \text{number.}$

$$\begin{array}{l|l} -3x & 4x - 9 = 11 \\ +9 & 4x = 20 \\ \div 4 & x = 5 \end{array} \quad \begin{array}{l} -3x \\ +9 \\ \div 4 \end{array}$$

$$7x - 9 = 3x + 11$$

$$7x - 3x - 9 = 11$$

$$4x = 11 + 9$$

$$4x = 20$$

$$x = 5$$

$$Q11) \quad 9x - 15 = 3x + 3$$

$$\begin{array}{l|l} -3x & 6x - 15 = 3 \\ +15 & 6x = 18 \\ \hline \div 6 & x = 3 \end{array} \quad \begin{array}{l|l} & -3x \\ & +15 \\ & \div 6 \end{array}$$

## Equations with brackets

- Method :
- ① Get rid of brackets by multiplying.
  - ② Bring  $x$  parts together
  - ③ Bring numbers together
  - ④ Divide by the coefficient of variable to find  $x$ .

Eg 1)

$$3(2x+1) = 2x+11$$

↖ ↗  
multiply

$$6x + 3 = \cancel{2x} + 11$$

$$\begin{array}{r} -2x \\ -3 \\ \hline -4 \end{array}$$

$$4x + \cancel{3} = 11$$

$$4x = 8$$

$$\overset{\sim}{x} = 2$$

$$\begin{array}{r} -\cancel{2x} \\ -3 \\ \hline -4 \end{array}$$

x = number.

$$\text{Eg 2)} \quad 4(2x-3) = 2(3x-5)$$

multiply

$$8x - 12 = \cancel{6}x - 10$$

$-6x$	$2x - \cancel{12} = -10$	$\cancel{-6}x$
$+12$	$2x = 2$	$+12$
$\div 2$	$x = 1$	$\div 2$

Class work Pg 8 Q 21  $\rightarrow$  25