

Solving Linear Equations

Solve: $2x + 7 = 15$

solve means find out what number x is

we can manipulate the equation as long as we do the same to both sides

$$2x + 7 = 15$$

-7 -7

we get rid of +7 by taking 7

$$2x = 8$$

$\div 2$ $\div 2$

to get rid of $\times 2$ we divide by 2

$$x = 4$$

Solve: $5x + 2 = 3x + 14$

$$5x + 2 = 3x + 14$$

$-3x$ $-3x$

The first step is to get rid of the smallest x . In this case $3x$:

$$2x + 2 = 14$$

-2 -2

Then we get x on its own:

$$2x = 12$$

$\div 2$ $\div 2$

$$x = 6$$