

Solving (Basic) Equations

Be able to solve a basic equation

Remember we can solve equations by **cover up** (using a finger).

$$\begin{aligned} x + 5 &= 9 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} p - 3 &= 12 \\ p &= 15 \end{aligned}$$

$$\begin{aligned} y - 7 &= 1 \\ y &= 8 \end{aligned}$$

We can also use our **cover up** method for these type of equations :-

$3x$ means 3 **times** x .

$$\begin{aligned} 3x &= 12 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} 2k &= 10 \\ k &= 5 \end{aligned}$$

$$\begin{aligned} 7y &= 56 \\ y &= 8 \end{aligned}$$

There are various other ways of solving equations :-

- the "cover up" method
- the method of "equal addition"
- the "change side \leftrightarrow change sign" rule.

$$3 \times \text{[finger]} = 12$$



You may come across these alternative methods later.

Exercise 2

1. Copy and solve each equation by finding the value of the letter :-

a $x + 3 = 7$

b $x + 9 = 12$

c $x + 1 = 17$

d $y + 11 = 21$

e $y - 3 = 6$

f $y - 1 = 21$

g $p - 10 = 0$

h $p - 50 = 10$

i $p + 6 = 6$

j $k - 18 = 0$

k $h + 15 = 30$

l $g - 40 = 40$

m $5 - q = 1$

n $8 + w = 11$

o $9 - z = 0$

p $15 + x = 50$

q $17 - r = 14$

r $55 + t = 55$

s $71 + f = 111$

t $145 - x = 77$

u $515 + y = 761$.

2. Copy each equation and find the value of the letter :-

a $3x = 6$

b $4m = 20$

c $5p = 30$

d $7q = 28$

e $6t = 36$

f $6a = 60$

g $3b = 36$

h $8d = 48$

i $2x = 24$

j $2p = 22$

k $4p = 56$

l $6m = 54$

m $10x = 110$

n $8t = 64$

o $14p = 42$

p $2b = 5$

q $2c = 9$

r $2n = 19$

s $4x = 10$

t $8x = 12$

u $10x = 55$

v $4x = 21$

w $10x = 34$

x $5x = 24$.