



# Substitution

1

 = 4     = 5






Use the given facts to work out the calculations.

a)  +  + 

13



b)  +  - 

3

c)  +  +  +  + 

23


2

 = 12     = 5

Use the given facts to work out the calculations.

a)  - 

7

b)  × 

60

c) Create your own calculation that will be equal to 22

e.g.  $\triangle + \square + \square$

3

If  $x = 5$ , write the values of the expressions in the corresponding grid.

The first one has been done for you.

$3x$	$x^2$	$2x - 5$
$4x + 2$	$\frac{x}{2}$	$2(x + 1)$
$7x$	$x + 9$	$x - 7$

15	25	5
22	2.5	12
35	14	-2

4

If  $a = 10$  and  $b = 6$ , work out the values of the expressions.

a)  $a + b = 16$

d)  $2a + b = 26$

b)  $a - b = 4$

e)  $3a - 17 = 13$

c)  $2a = 20$

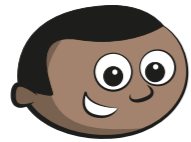
f)  $2(a - b) = 8$

5

If  $m = \frac{4}{5}$  and  $k = 0.1$ , work out the value of  $m + 2k$

1

6



Mo

It does not matter what  $p$  and  $q$  are,  $p + q$  and  $q + p$  will always give the same answer.

Do you agree with Mo? Yes

Explain your answer.

Addition is commutative.

7

$$m = 7 \quad n = 5$$

Write  $>$ ,  $<$  or  $=$  to compare the expressions.

a)  $2m$   $>$   $10$

b)  $n - 1$   $<$   $5$

c)  $2n + m$   $<$   $2m + n$

d)  $7n$   $=$   $5m$

8

$$a = 10$$

Write the expressions in order, starting with the smallest value.

$$5a$$

$$a + 5$$

$$\frac{a}{5}$$

$$a^2$$

$$\frac{a}{5}$$

$$a + 5$$

$$5a$$

$$a^2$$

9

$$a = 15$$

Write three different algebraic expressions that give a value of 40

e.g.

$$2a + 10$$

$$3a - 5$$

$$\frac{8a}{3}$$

10

Complete the table.

$x$	$5x$	$5x - 1$
2	10	9
10	50	49
12	60	59
5	25	24
7	35	34
20	100	99

