## **Substitution**



1



Use the given facts to work out the calculations.

- a) + + +
- b) + -
- c) + + + + + +

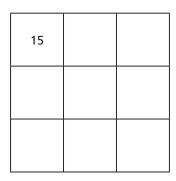
2



Use the given facts to work out the calculations.

- a) \_\_\_
- c) Create your own calculation that will be equal to 22
- If x = 5, write the values of the expressions in the corresponding grid. The first one has been done for you.

3 <i>x</i>	<i>x</i> <sup>2</sup>	2 <i>x</i> – 5
4 <i>x</i> + 2	$\frac{x}{2}$	2(x + 1)
<b>7</b> x	x + 9	x - 7



- If a = 10 and b = 6, work out the values of the expressions.
  - a) a + b

**d)** 2a + b

**b)** a - b

**e)** 3*a* – 17

**c)** 2*a* 

- **f)** 2(a b)
- If  $m = \frac{4}{5}$  and k = 0.1, work out the value of m + 2k



6



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? Explain your answer.

7

$$m = 7$$
  $n = 5$ 

Write >, < or = to compare the expressions.

- a) 2*m* ( ) 1
- b) n-1
- c) 2n + m 2m + n
- d) 7n 5m

## **Substitution**



- If a = 10 and b = 6, work out the values of the expressions.
  - a) a + b

**d)** 2a + b

**b)** a - b

**e)** 3*a* – 17

**c)** 2*a* 

- **f)** 2(a b)
- If  $m = \frac{4}{5}$  and k = 0.1, work out the value of m + 2k



6



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?

Explain your answer.



$$m = 7$$
  $n = 5$ 

Write >, < or = to compare the expressions.

- a) 2*m* ( ) 10
- **b)** n-1 ( ) 5
- c) 2n + m 2m + r
- d) 7n 5m



$$a = 10$$

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

**5***a* 

*a* + 5

 $\frac{a}{5}$ 

 $a^{\mathsf{2}}$ 

9

$$a = 15$$

Write three different algebraic expressions that give a value of 40

10 Complete the table.



x	5 <i>x</i>	5 <i>x</i> – 1
2		
10		
12		
	25	
		34
		99