

# Evaluating Algebraic Expressions

## ***Substitute and evaluate***

- replace the variables with the numbers given
- use brackets around the substituted values
- use BEDMAS to evaluate the resulting expression

Evaluate  $2x + 3y$  if  $x = 10$  and  $y = 3$

$$= 2(10) + 3(3)$$

$$= 20 + 9$$

$$= 29$$

Evaluate  $-2p - 5q$  if  $p = 1$  and  $q = 4$

$$= -2(1) - 5(4)$$

$$= -2 - 20$$

$$= -22$$

Evaluate  $3(m + 2n) + 4$  if  $m = -2$  and  $n = 6$

$$= 3(-2 + 2(6)) + 4$$

$$= 3(-2 + 12) + 4$$

$$= 3(10) + 4$$

$$= 30 + 4$$

$$= 34$$

Evaluate  $xy + 3x - y$  if  $x = 2$  and  $y = 4$

$$= (2)(4) + 3(2) - 4$$

$$= 8 + 6 - 4$$

$$= 14 - 4$$

$$= 10$$