In this exercise we are going to:

- identify variables and constants in given formulae and equations.
- revise Term 1 work on page 47 of the Learner's Book.
- remember that the sign at the front of the term belongs to that term.
- remember that the degree of an expression is the highest power of the variable.

Look at these examples:

For each of the following expressions: **1.** $-3x^2 - 4x - 11$

2.
$$9y^2 - 7xz$$

write down:

- a. the variables used
- b. the constant term
- c. one mathematical rule

Answers:

- **1. a.** the variable used is x
 - **b.** the constant term is –11
 - c. $3x^2$ means 3 multiplied by x^2 or -4x is -4 multiplied by x
- **2. a.** the variables used are x, y and z
 - b. there is no constant term
 - c. $9y^2$ means 9 multiplied by y^2 or -7xy means $-7 \times x \times y$

Complete these exercises.

For each of the following expressions, write down:

- a. the variables used
- b. the constant term
- c. one mathematical rule
- **1.** $-4a^2 + 6a 5$
- **3.** $10 3b^2 + 4a$
- **5.** 3fg 5gh 2f
- **7.** $-4 \frac{x}{y} + 5x 7y$

2. 3abc - 6bc4. -8 - ab - 2mn6. $\frac{3x + y}{2xy} - 1$ 8. $ax^3 - 2bx^3 + a$

- **9.** Consider the expression: $4a^2 5a^3 + 6 3a$
 - **a.** Write the expression in descending powers of *a*.
 - **b.** What is the degree of the expression?
 - **c.** What is the constant term?
 - **d.** What is the coefficient of a^3 ?
- **10.** Consider the expression: $-3x^2 + 8x^3 + 2x^6 3x^4$
 - **a.** Write the expression in descending powers of *x*.
 - **b.** What is the degree of the expression?
 - **c.** What is the constant term?
 - **d.** What is the coefficient of x^4 ?