### **Basic Skills Practice**

## **Rounding, Estimating and Significant Figures**

- a) Round 348.967 to the nearest tenth.
  - b) A rectangular field is 98.47m by 231.36m. Estimate its area.
  - c) Round 534.785 to two significant figures.

### **Fractions**

- 2 a)  $\frac{3}{8} \times 96 =$ 
  - b)  $\frac{4}{5} \div \frac{3}{7} =$

### **Mixed Numbers**

- 3 a)  $6\frac{5}{6} 3\frac{7}{8} =$ 
  - b)  $7\frac{5}{11} \times 1\frac{2}{5} =$

## Multiplication

- 4 a)  $43 \times 37 =$ 
  - b)  $6.9 \times 8.2 =$
  - c)  $(2.3 \times 10^3) \times (8.1 \times 10^6) =$

### **Division**

- 5 a) 3690 ÷ 9 =
  - b) 234365 ÷ 15 =
  - c)  $\frac{18 \times 27 \times 45 \times 121}{91 \times 22 \times 24 \times 99} =$

# **Squaring and Cubing Numbers**

- 6 a)  $7^3 13^2 =$ 
  - b)  $11^2 + 8^3 =$

#### Ratio

- a) Mary, Mungo and Midge split some sweets in the ratio 2:5:7. Mungo got 56 sweets. How many did the others get?
  - b) Freda, Bill and Murray split 300 sweets in the proportion 5:7:8. How many more sweets did Murray get than Freda?
  - c) Rodney, Raquel and Del raised some money in the proportion of 2:5:8. If Raquel raised £18.90 more than Rodney, how much did the three of them raise altogether?

# **Direct Proportion**

8 A is directly proportional to B.

When A is 7, B is 9.

- a) Find a formula relating A to B
- b) Calculate B when A = 15.
- c) Calculate A when B = 30.

## Volume

- 9 a) A box has the dimensions 18cm by 24cm by 16cm. Calculate the volume of the box.
  - b) A sphere has a radius of 18cm. What is the volume of the sphere?
  - c) A triangular prism has a cross sectional area of 75cm² and a length of 94cm. What is the volume of the prism?