## Basic Skills Practice

## Rounding, Estimating and Significant Figures

1 a) Round 348.967 to the nearest tenth.
b) A rectangular field is 98.47 m by 231.36 m . 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) $\left(2.3 \times 10^{3}\right) \times\left(8.1 \times 10^{6}\right)=$

## Division

5 a) $3690 \div 9=$
b) $234365 \div 15=$
c) $\frac{18 \times 27 \times 45 \times 121}{81 \times 22 \times 24 \times 99}=$

## Squaring and Cubing Numbers

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

## Ratio

7 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

$8 \quad \mathrm{~A}$ 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 18 cm by 24 cm by 16 cm . Calculate the volume of the box.
b) A sphere has a radius of 18 cm . What is the volume of the sphere?
c) A triangular prism has a cross sectional area of $75 \mathrm{~cm}^{2}$ and a length of 94 cm . What is the volume of the prism?

