**Basic Skills Practice**

**Rounding, Estimating and Significant Figures**

1    a)   Round 348.967 to the nearest ten.

        b)   A rectangular field is 104.56m by 87.36m.  Estimate its area.

        c)   Round 2038.9987 to two significant figures.

**Fractions**

2    a)   $\frac{3}{5} \times 72 =$

        b)   $\frac{4}{7} \div \frac{3}{4} =$

**Mixed Numbers**

3    a)   $4\frac{5}{6} + 3\frac{7}{8} =$

        b)   $6\frac{5}{9} \times 3\frac{2}{3} =$

**Multiplication**

4    a)   $26 \times 16 =$
        b)   $4.3 \times 7.2 =$
        c)   $(2.3 \times 10^3) \times (8.1 \times 10^6) =$

**Division**

5    a)   $279 \div 9 =$
        b)   $18291 \div 33 =$
        c)   $\frac{65 \times 56 \times 91 \times 90}{81 \times 26 \times 24} =$

**Squaring and Cubing Numbers**

6    a)   $3^3 - 2^2 =$
        b)   $7^2 + 4^3 =$

**Ratio**

7    a)   Mary, Mungo and Midge split some sweets in the ratio 3:7:15.  Mungo got 56 sweets.  How many did the others get?

        b)   Bill and Murray split 300 sweets in the proportion 7:8.  How many more sweets did Murray get?

        c)   Rodney, Raquel and Del raised some money in the proportion of 2:5:8.  If Raquel raised £12.60 more than Rodney, how much did the three of them raise altogether?

**Direct Proportion**

8    A is directly proportional to B.
     When A is 5, 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 35cm by 45cm by 20cm.  Calculate the volume of the box.

     b)    A sphere has a radius of 15cm.  What is the volume of the sphere?

     c)    A triangular prism has a cross sectional area of 47cm$^2$ and a length of 60cm.  What is the volume of the prism?