

S1 Topic 1: Whole numbers

1) Add, subtract and multiply and divide by a single digit without a calculator.

$$\begin{array}{r} 867 \\ + 908 \\ \hline 1775 \end{array}$$

$$\begin{array}{r} 7913 \\ - 149 \\ \hline 644 \end{array}$$

$$\begin{array}{r} 45723 \\ \times 7 \\ \hline 3311 \end{array}$$

$$4 \overline{) 73428}$$

2) Carry out operations in the correct order (BIDMAS)

$$\begin{aligned} 100 - 96 \div 2 \\ = 100 - 48 \\ = 52 \end{aligned}$$

$$\begin{aligned} 4 \times 6 + 3 \times 2 \\ = 24 + 6 \\ = 30 \end{aligned}$$

$$\begin{aligned} 4 \times (6 + 3) \times 2 \\ = 4 \times 9 \times 2 \\ = 72 \end{aligned}$$

3) Round a number to a given degree of accuracy

7 368 rounded to the nearest 1 000 is 7 000

7 368 rounded to the nearest 100 is 7 400

7 368 rounded to the nearest 10 is 7 370

4) Routinely estimate before calculating

$7\,889 + 1\,028$ is roughly $8\,000 + 1\,000$ so the answer should be close to 9 000

$2\,134 \times 8.897$ is roughly $2\,000 \times 9$ so the answer should be close to 18 000

5) Evaluate powers

$$8^2 = 8 \times 8 = 64$$

$$(1 + 2 + 3)^3 = 6^3 = 216$$

$$5^3 = 5 \times 5 \times 5 = 125$$

$$3^4 = 3 \times 3 \times 3 \times 3 = 81$$

6) Solve problems by adding, subtracting, multiplying or dividing

a) When the bus left Carnoustie there were 47 people on board. At Monifieth 13 got off and 20 got on. In Broughty Ferry 31 people got off and 28 got on. How many people are on the bus now?

b) Granny Green won £4000. She put some of this money in her savings account and shared the rest between her five grandchildren. If each grandchild got £500 how much did she put in her savings account?

c) A lorry is leaving the toothbrush factory. On the lorry there are 600 boxes of toothbrushes. In each box there are 200 packs of toothbrushes. Each pack contains four toothbrushes. How many toothbrushes are in the lorry?

**REMEMBER TO SHOW ALL YOUR WORKING
AND EXPLAIN YOUR ANSWER FULLY!**