Day 232 **B Tier 10-a-day**

1 (a) Priya scores 19 out of 40 in a test. Write this as a percentage.
(b) Write 90p as a percentage of £4.

2 (a) Convert 12.5 litres to ml.
(b) Convert 15 000 cm^2 to m^2.

3 A jug holds 2.8 litres of juice.
Each glass holds 200 ml.
How many glasses can be filled from the jug?

4 A triangle has sides of length (3x + 7) cm, (4x − 3) cm and (4x + 3) cm.
Write down an expression, in terms of x, for the perimeter of the triangle.
Give your answer in its simplest form.

5 A stratified sample of 40 students is taken from the 600 students in the table.
Work out how many students should be sampled from Year 9.

Group	Students
Year 7	240
Year 8	240
Year 9	120

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6 (a) Solve $-4 \leq 3x - 4 \leq 2$ (b) Write down the integer values of x that satisfy this inequality.	
7 A triangular prism has a right-angled triangle as its cross-section. The two shorter sides of the triangle are 10 cm and 5 cm. The length of the prism is 6 cm. Work out the volume of the prism.	
8 George bought a laptop for £200 and sold it for £270. Work out the percentage profit.	
9 Omar and Priya share 28 marbles in the ratio 1 : 3. Work out how many Omar gets.	
10 A circle has centre O and radius 13 cm. AB is a chord and M is the midpoint of AB. OM is perpendicular to AB. Work out the value of x. The diagram is not drawn accurately. 	