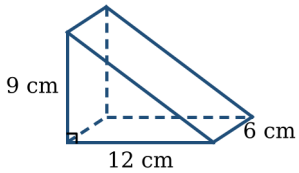
Day 93	A Tier 10-a-day
1 (a) Work out 0.5×0.4 (b) Work out $0.08 \div 0.04$	
2 y is inversely proportional to x^2. When $x = 1$, $y = 11$. (a) Find a formula for y in terms of x. (b) Work out the positive value of x when $y = 0.44$.	
3 Solve the simultaneous equations $3x + y = -6$ $4x + 2y = -6$	
4 Write $7^9 \times (7^7)^6$ as a single power of 7.	
5 An isosceles triangle has sides of length 41 cm, 41 cm and 80 cm. Work out the area of the triangle.	

Day 93	A Tier 10-a-day
6 (a) Change 250 cm^3 to litres. (b) Change 12 litres to cm^3.	
7 The graph of y = f(x) has a maximum point at (−1, 4). Write down the coordinates of the turning point of the graph of (a) y = f(x) − 5 (b) y = −f(x)	
8 The diagram shows a triangular prism. The cross-section is a right-angled triangle. Work out the total surface area of the prism. The diagram is not drawn accurately. 	
9 Grace invests £8000 in a savings account. (Calculator) The account pays compound interest at a fixed rate each year. After 2 years there is £8820 in the account. Work out the annual rate of interest.	
10 The diagram shows a cuboid. Work out the length of the diagonal AG. The diagram is not drawn accurately. 