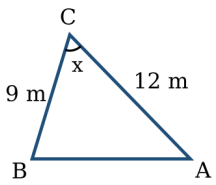
Day 14	A Tier 10-a-day
1 A train travels at 72 km/h for 1 hour 45 minutes. Work out the distance travelled.	
2 A circle has diameter 26 cm. Work out, in terms of π, (a) the circumference, (b) the area.	
3 Expand and simplify $(x + 2)^2 - (x + 1)(x - 4)$	
4 The area of triangle ABC is 47.2 m^2. (Calculator) Angle x is acute. Work out the size of angle x. Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
5 (a) Write 35 and 20 as products of prime factors. (b) Find the highest common factor (HCF) and the lowest common multiple (LCM) of 35 and 20.	

Day 14	A Tier 10-a-day
6 Make r the subject of $V = \frac{4}{3}\pi r^3$	
7 a : b = 5 : 7 b : c = 1 : 1 (a) Work out the ratio a : b : c (b) a, b and c add up to 152. Work out the value of c.	
8 Solve $5^x = 125$	
9 Solve $\frac{5}{(x-4)} + \frac{2}{(x+2)} = 1$	
10 Isla invests £9,000 in a savings account. (Calculator) Compound interest is paid at a fixed rate each year. After 2 years the investment is worth £12,960. Work out the annual rate of interest.	