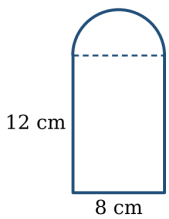
Day 236	A Tier 10-a-day
1 A shop sells cereal in 3 different sizes. Small bag: 250 g for 60p Medium bag: 400 g for 85p Large bag: 500 g for 95p Which bag is the best value for money? You must show your working.	
2 Priya is x years old. Her aunt is 4 times as old as Priya, plus 6 years. The sum of their ages is 56 years. Work out how old her aunt is.	
3 Here are the scores of 11 students in a test. 68 35 9 57 66 41 54 42 26 28 76 (a) Work out the median. (b) Work out the interquartile range.	
4 $f(x) = 3x + 4$ $g(x) = x^2 - 2$ Find $fg(-1)$	
5 The diagram shows a shape made from a rectangle and a semicircle. Work out the area of the shape. Give your answer in terms of π. The diagram is not drawn accurately.  	

Day 236	A Tier 10-a-day
6 A washing machine costs £200 plus VAT at 20%. In a sale, the price including VAT is reduced by 20%. Work out the sale price of the washing machine.	
7 $f(x) = 4x - 7$ $g(x) = x^2 + 1$ Solve $gf(x) = 26$	
8 Write the recurring decimal $0.\dot{1}2\dot{4}$ as a fraction in its simplest form.	
9 A cyclist travels 380 metres in 18.2 seconds. The distance is correct to the nearest 10 metres and the time to the nearest 0.1 second. (a) Work out the upper bound and the lower bound of the speed in m/s. (b) Write the speed to a suitable degree of accuracy. Give a reason for your answer.	
10 The diagram shows a trapezium. Work out the area of the trapezium. The diagram is not drawn accurately. 