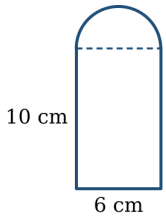
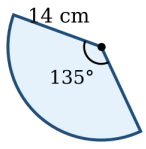
Day 187	A Tier 10-a-day
1 Expand and simplify $(3x + 1)(3x + 6)$	
2 A lorry travels at 81 km/h. Work out this speed in metres per minute.	
3 Work out $(3\frac{1}{3} - 1\frac{1}{2}) \div 3\frac{2}{3}$ Give your answer as a mixed number in its simplest form.	
4 The diagram shows a shape made from a rectangle and a semicircle. Work out the perimeter of the shape. Give your answer in terms of π. The diagram is not drawn accurately. 	
5 5 adult tickets and 3 child tickets cost £78. 5 adult tickets and 2 child tickets cost £72. Work out the cost of one adult ticket.	

Day 187	A Tier 10-a-day
6 A bag contains 5 red and 2 blue counters. Two counters are taken at random without replacement. Work out the probability that the two counters are different colours.	
7 Solve $2x + 4 > 7$	
8 (a) Show that $0.\dot{3}\dot{5} = \frac{35}{99}$ (b) Hence write $1.\dot{3}\dot{5}$ as a mixed number in its simplest form.	
9 The diagram shows a sector of a circle of radius 14 cm. Work out the area of the sector. Give your answer in terms of π. The diagram is not drawn accurately. 	
10 A roll of ribbon is $3\frac{5}{8}$ metres long. Pieces of $\frac{1}{8}$ metre are cut from it. How many pieces can be cut?	