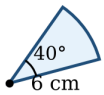
Day 64	A Tier 10-a-day
1 Work out the value of $5x^2 - 2x - 9$ when $x = -3$	
2 A train travels at 15 m/s. Work out this speed in kilometres per hour.	
3 3 muffins and 5 coffees cost £39. 2 muffins and 5 coffees cost £36. Work out the cost of one coffee.	
4 Sara is paid £15.60 per hour for a basic week of 36 hours. (Calculator) Overtime is paid at time and a quarter. Last week Sara worked 7 hours of overtime. Work out Sara's total pay for the week.	
5 The diagram shows a sector of a circle of radius 6 cm. Work out the area of the sector. Give your answer in terms of π. The diagram is not drawn accurately. 	

Day 64 **A Tier 10-a-day**

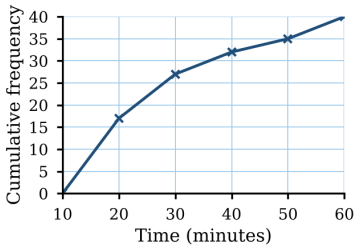
6 (a) Show that $0.\dot{8}\dot{0} = \frac{80}{99}$

(b) Hence write $3.\dot{8}\dot{0}$ as a mixed number in its simplest form.

7 Expand and simplify
$(x - 3)(x + 1)(x + 3)$

8 Change 2.25 m^2 to cm^2.

9 The cumulative frequency graph shows the times taken by 40 people to finish a puzzle.
Use the graph to find an estimate for
(a) the median,
(b) the number of people with a time greater than 40 minutes.



10 The diagram shows a cuboid.
Work out the length of the diagonal AG.
The diagram is not drawn accurately.

