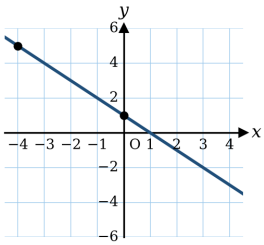
Day 134	A Tier 10-a-day
1 The scale of a map is 1 : 100000. A road is 5 km long. Work out the length of the road on the map, in centimetres.	
2 A cuboid has length 8 cm and width 11 cm. Its total surface area is 290 cm^2. Work out the height of the cuboid.	
3 Find the equation of the straight line shown. Give your answer in the form y = mx + c 	
4 A tank is in the shape of a cuboid measuring 80 cm by 150 cm by 60 cm. Water flows in at 20 litres per minute until the tank is full. Work out how long this takes. Give your answer in minutes.	
5 A sector of a circle has radius 16 cm and an arc length of 8π cm. Work out the angle at the centre of the sector.	

Day 134	A Tier 10-a-day
6 (a) Write 0.0009 in standard form. (b) Write 8.9×10^3 as an ordinary number.	
7 A regular dodecagon and a square share the side AB and are on opposite sides of it. The two shapes meet at the point A. Work out the size of the angle at A that is not inside either shape.	
8 Solve $\frac{2}{(x-3)} + \frac{6}{(x+5)} = 1$	
9 A is the point $(3, -1)$ and B is the point $(-5, -5)$. Find the equation of the perpendicular bisector of AB.	
10 A cyclist travels 790 metres in 4.6 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.	