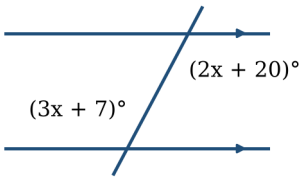
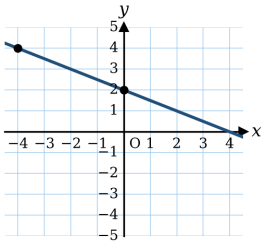
Day 360	A Tier 10-a-day
1 A triangle has sides of length 21 cm, 28 cm and 20 cm. Is the triangle right-angled? You must show your working.	
2 (a) A film starts at 6:20 pm. The film lasts 1 hours 48 minutes. Work out the time it ends. (b) Change 3.7 hours into hours and minutes.	
3 The diagram shows two parallel lines crossed by a straight line. (a) Work out the value of x. (b) Work out the size of the angle marked (2x + 20)°. The diagram is not drawn accurately. 	
4 Work out the equation of the straight line. Give your answer in the form y = mx + c 	
5 Jack invests £2500 in a savings account. (Calculator) The account pays 2% compound interest per year. Work out the amount in the account after 4 years.	

Day 360 **A Tier 10-a-day**

6 A plank is 18.4 m long and a pipe is 11.7 m long.
Each length is correct to the nearest 0.1 m.
Work out the upper bound for the difference in their lengths.

7 4 identical circles of radius 2 cm fit exactly inside a rectangle.
The circles touch each other and the sides of the rectangle. (Calculator)
Work out the area of the shaded region.
Give your answer to 3 significant figures.



8 n is the smallest positive integer such that 400 × n is a cube number.
Find the value of n.

9 Prove that the sum of two consecutive multiples of 3 is always an odd multiple of 3.

10 A van driver makes a journey. The distance-time graph shows the journey.
(a) For how many minutes did the van driver stop?
(b) Work out the speed during the first part of the journey. Give your answer in km/h.

