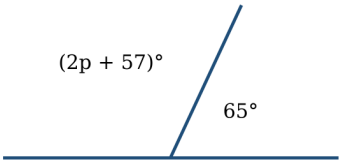
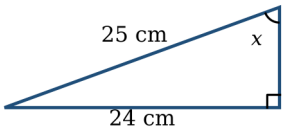
Day 294	B Tier 10-a-day
1 The diagram shows 2 angles on a straight line. Work out the value of p. The diagram is not drawn accurately.  	
2 Sam and Leo share some money in the ratio 5 : 3. Sam gets £30 more than Leo. How much money does Leo get?	
3 Write 162 as a product of its prime factors. Give your answer in index form.	
4 Triangle ABC has a right angle, a hypotenuse of 12 mm and another side of 8 mm. Triangle XYZ has a right angle, a hypotenuse of 12 mm and another side of 8 mm. Are the two triangles congruent? Give a reason for your answer.	
5 Work out $3\frac{1}{2} - 1\frac{3}{4}$ Give your answer as a mixed number.	

Day 294 **B Tier 10-a-day**

6 Two fair spinners, numbered 1 to 4 and 1 to 4, are spun.
Work out the probability that the total score is less than 4.

7 Find the size of angle x. (Calculator)
Give your answer correct to 1 decimal place.
The diagram is not drawn accurately.



8 The table shows the lengths of some leaves.
(a) Write down the modal class.
(b) Work out an estimate for the mean.

Length, l (cm)	Frequency
$20 < l \leq 25$	4
$25 < l \leq 30$	5
$30 < l \leq 35$	2
$35 < l \leq 40$	4

9 Factorise $n^2 - 9$

10 A rectangle has length $(x + 5)$ cm and width $(x - 2)$ cm.
The area of the rectangle is 18 cm^2.
(a) Show that $x^2 + 3x - 28 = 0$
(b) Hence work out the length of the rectangle.