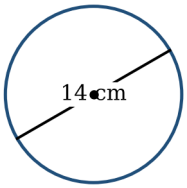
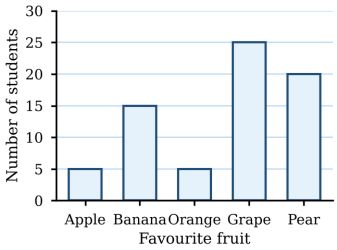
Day 357 **B Tier 10-a-day**

1 A triangle has sides of length (2x + 5) cm, (4x − 5) cm and (3x + 1) cm.
Write down an expression, in terms of x, for the perimeter of the triangle.
Give your answer in its simplest form.

2 The diagram shows a circle with diameter 14 cm.
Work out the area of the circle.
Give your answer in terms of π.
The diagram is not drawn accurately.



3 The bar chart shows some information.
(a) Write down the mode.
(b) What fraction of the total is Grape? Give your answer in its simplest form.



4 Write 3708.9302
(a) correct to 2 decimal places,
(b) correct to 3 significant figures.

5 The mean of 6 numbers is 19.
5 of the numbers are 24, 25, 18, 15, 22.
Work out the other number.

Day 357	B Tier 10-a-day
6 A prism has a cross-section with area 55 cm^2. The length of the prism is 11 cm. Work out the volume of the prism.	
7 Chloe and Priya share some money in the ratio 5 : 3. Chloe gets £4 more than Priya. Work out the total amount of money.	
8 The length of a rectangle is 14 cm and its width is 30 cm. Both measurements are correct to the nearest cm. Work out the upper bound for the perimeter of the rectangle.	
9 Show that $(n + 5)(n + 3) - n(n + 8)$ has the same value for every whole number n.	
10 In a sale, the price of a sofa is reduced by 40%. (Calculator) Two weeks later it is reduced by a further 25% of the new price. The final price is £180. Work out the original price of the sofa.	