Day 88 **B Tier 10-a-day**

1 Solve $p + 8 = 23$

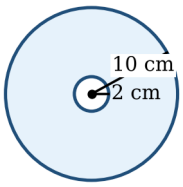
2 £1 = 1.2 Swiss francs
(a) Change £200 into Swiss francs.
(b) Change 48 francs into pounds.

3 How many lines of symmetry does a rectangle have?

4 The table shows the numbers of brothers and sisters of some students.
Work out the mean.

Siblings	**3**	**4**	**5**	**6**	**7**	**8**
Frequency	6	5	5	9	7	4

5 Show that $(2n + 1)^2 - 1$ is a multiple of 4 for any whole number n.

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6 (a) The point P(−2, 3) is rotated 90° anticlockwise about the origin. Write down the coordinates of the image. (b) The point P(−2, 3) is rotated 90° clockwise about the origin. Write down the coordinates of the image.	
7 Work out (a) 5^{-3} (b) $11^0 + \sqrt{4}$	
8 The diagram shows two circles with the same centre. The radius of the larger circle is 10 cm. The radius of the smaller circle is 2 cm. Work out the area of the shaded region. Give your answer in terms of π. The diagram is not drawn accurately. 	
9 A TV costs £40. In a sale the price is reduced by 10%. (a) Work out the new price. (b) A car is worth £4000. Its value goes down by 30% in a year. Work out its new value.	
10 In a sale, the price of a sofa is reduced by 40%. (Calculator) Two weeks later it is reduced by a further 50% of the new price. The final price is £30. Work out the original price of the sofa.	