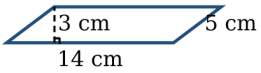
Day 230 **A Tier 10-a-day**

1 $f(x) = \frac{x + 4}{2}$

(a) Find $f^{-1}(x)$

(b) Work out $f^{-1}(1)$

2 The diagram shows a parallelogram.
Work out its area.
The diagram is not drawn accurately.

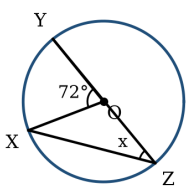


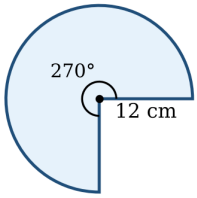
3 (a) Write 0.00083 in standard form.

(b) Write 6.2×10^6 as an ordinary number.

4 Make t the subject of $s = \frac{t - 7}{9}$

5 X, Y and Z are points on a circle with centre O.
Angle XOY = 72°.
Work out the size of angle x.
Give a reason for your answer.



Day 230	A Tier 10-a-day
6 A bag contains 4 yellow, 5 white and 3 black balls. Two balls are taken at random without replacement. Work out the probability that the two balls are different colours.	
7 The diagram shows a sector of a circle of radius 12 cm. Work out the length of the arc of the sector. Give your answer in terms of π. The diagram is not drawn accurately. 	
8 Write as a single fraction $\frac{-1}{(x+2)} - \frac{4}{(x-2)}$	
9 (a) Show that $0.\dot{2}\dot{1} = \frac{7}{33}$ (b) Hence write $3.\dot{2}\dot{1}$ as a mixed number in its simplest form.	
10 Kai earns £26000 a year. She pays no tax on the first £12000. She pays 30% tax on the rest. Work out how much tax she pays in a year.	