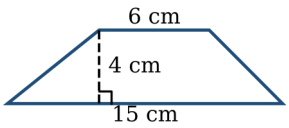
Day 230 **B Tier 10-a-day**

1 The table shows the times taken by some students to complete a task.
(a) Write down the modal class.
(b) Work out an estimate for the mean.

Time, t (minutes)	Frequency
$0 < t \leq 5$	4
$5 < t \leq 10$	12
$10 < t \leq 15$	6
$15 < t \leq 20$	8

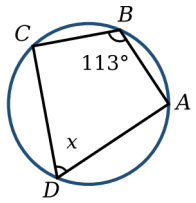
2 Here is a formula.
$y = mx + c$
Work out the value of y when m = 5, x = 2 and c = 3

3 Work out the area of the trapezium.
The diagram is not drawn accurately.



4 Sophie has $\frac{2}{5}$ of £190.
Zara has 60% of £320.
Who has more money? You must show your working.

5 Solve $\frac{y}{5} + 6 \geq 8$

Day 230	B Tier 10-a-day
6 A ramp is 10 m long and rises 4.3 m. (Calculator) Work out the angle the ramp makes with the horizontal. Give your answer correct to 1 decimal place.	
7 43 adults were asked. 18 of them like tea and 21 of them like coffee. 6 of them did both. (a) How many did neither? (b) One is chosen at random. Find the probability that they like tea but do not like coffee.	
8 A, B, C and D are points on a circle. Angle ABC = 113°. Work out the size of angle ADC, marked x. Give a reason for your answer. The diagram is not drawn accurately. 	
9 A rectangle has length (3x + 4) cm and width (x + 4) cm. The perimeter of the rectangle is 88 cm. (a) Work out the value of x. (b) Work out the area of the rectangle.	
10 In a sale, the price of a sofa is reduced by 10%. (Calculator) Two weeks later it is reduced by a further 50% of the new price. The final price is £45. Work out the original price of the sofa.	