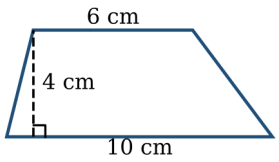
Day 362 **B Tier 10-a-day**

1 Here are the first four terms of a sequence.
1, 5, 25, 125
(a) Write down the next two terms.
(b) Describe the rule for continuing the sequence.

2 Work out
(a) $\frac{1}{2} \times \frac{1}{3}$
(b) $\frac{1}{8} \div \frac{2}{3}$
Give each answer in its simplest form.

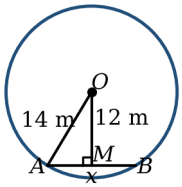
3 Find the area of the trapezium.
The diagram is not drawn accurately.



4 The table shows the pets owned by each student in a class.
(a) Write down the mode.
(b) Work out the median.

Pets	0	1	2	3	4
Frequency	8	2	6	6	4

5 The exchange rate is £1 = $1.3. (Calculator)
(a) Change £80 to dollars.
(b) Change $130 to pounds (£).

Day 362	B Tier 10-a-day
6 A circle has centre O and radius 14 m. (Calculator) AB is a chord and M is the midpoint of AB. OM is perpendicular to AB. Work out the value of x. Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
7 Make x the subject of the formula $y = mx + c$	
8 F is directly proportional to m. When m = 2, F = 16. Find the value of F when m = 7.	
9 Write each answer as a single power of 4. (a) $4^8 \times 4^5$ (b) $4^{13} \div 4^5$	
10 In a room, the ratio of boys to girls is 5 : 9. There are 72 girls. More boys join so that there are equal numbers of boys and girls. How many boys join?	