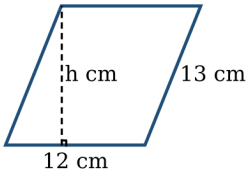
Day 65 **A Tier 10-a-day**

1 Make w the subject of $z = 8(w + 6)$

2 Chloe spends $\frac{3}{4}$ of the money on a phone case and $\frac{3}{5}$ of the money that is left on headphones.
Chloe has £42 left.
How much money did Chloe have to begin with?

3 The area of this parallelogram is 144 cm^2.
Work out the value of h.
The diagram is not drawn accurately.



4 The table shows the masses, in kg, of 40 parcels.
(a) Write down the class that contains the median.
(b) Work out an estimate for the mean. Give your answer to 1 decimal place.

Mass, m (kg)	Frequency
$10 < m \leq 15$	8
$15 < m \leq 20$	9
$20 < m \leq 25$	19
$25 < m \leq 30$	4

5 Simplify fully

$$\frac{x^2 - 49}{x^2 - 7x}$$

Day 65 **A Tier 10-a-day**

6 Lena invests £1500 in a savings account. (Calculator)
The account pays 8% compound interest per year.
Work out the interest earned in 2 years.

7 $f(x) = 4x - 4$
$g(x) = x^2 - 6$
Find $fg(5)$

8 Write $0.8\dot{2}$ as a fraction in its simplest form.

9 The table gives information about 102 measurements.
A histogram is drawn using this information.
(a) Work out the missing frequency.
(b) Work out the height of the bar for the class $0 < m \leq 10$.

Mass, m (g)	Frequency
$0 < m \leq 10$	26
$10 < m \leq 30$	40
$30 < m \leq 60$	24
$60 < m \leq 65$	?

10 A cone has base radius 3 cm and perpendicular height 12 cm.
Work out the volume of the cone. Give your answer in terms of π.