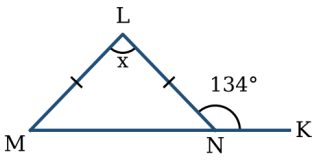
Day 305 **A Tier 10-a-day**

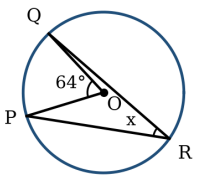
1 LMN is an isosceles triangle with LM = LN.
MNK is a straight line.
Angle LNK = 134°.
Work out the size of angle x.
The diagram is not drawn accurately.



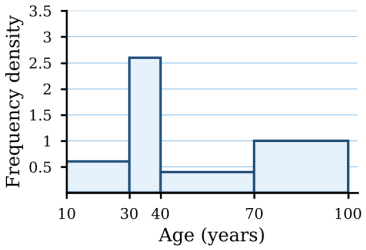
2 Solve the simultaneous equations
$4x - 2y = -14$
$3x - y = -9$

3 (a) Work out 0.6×0.6
(b) Work out $4.0 \div 0.4$

4 P, Q and R are points on a circle with centre O.
Angle POQ = 64°.
Work out the size of angle x.
Give a reason for your answer.



5 Factorise $2x^2 + 5x + 3$

Day 305	A Tier 10-a-day
6 Two similar statues have heights 18 cm and 24 cm. The surface area of the smaller one is 81 cm^2. Work out the surface area of the larger one.	
7 A rectangle has length 6.1 m and width 6.4 m. Each measurement is correct to the nearest 0.1 m. Work out the lower bound for the perimeter of the rectangle.	
8 The histogram shows information about the age of some items. (a) Work out the number of items with a age in the class 40 to 70 years. (b) Work out an estimate for the number with a age greater than 55 years. 	
9 Solve the simultaneous equations $y = x^2 + 8x + 14$ $y = x + 4$	
10 Ben invests £2000 in a savings account. (Calculator) The account pays compound interest at a fixed rate each year. After 2 years there is £2247.20 in the account. Work out the annual rate of interest.	