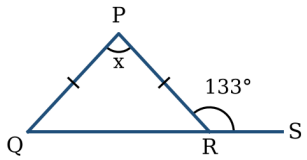
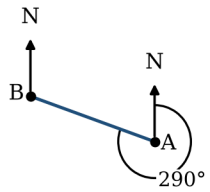
Day 207 **A Tier 10-a-day**

1 PQR is an isosceles triangle with PQ = PR.
QRS is a straight line.
Angle PRS = 133°.
Work out the size of angle x.
The diagram is not drawn accurately.



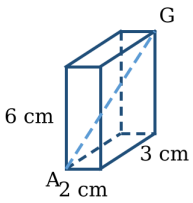
2 Make m the subject of $n = \frac{m - 4}{2}$

3 The bearing of B from A is 290°.
Work out the bearing of A from B.
The diagram is not drawn accurately.



4 (a) Write 0.000039 in standard form.
(b) Write 8.9×10^3 as an ordinary number.

5 Solve $\frac{x + 1}{4} - \frac{x - 3}{5} = 1$

Day 207	A Tier 10-a-day
6 A tank is in the shape of a cuboid measuring 60 cm by 150 cm by 40 cm. It already contains 100 litres of water. Water flows in at 4 litres per minute until the tank is full. Work out how long this takes. Give your answer in minutes.	
7 A rectangle has length 25 cm and width 30 cm. Each measurement is correct to the nearest cm. Work out the lower bound for the perimeter of the rectangle.	
8 6 workers take 9 days to build a wall. All the workers work at the same rate. How many workers are needed to build a wall in 3 days?	
9 The diagram shows a cuboid. Work out the length of the diagonal AG. The diagram is not drawn accurately. 	
10 Jack invests £17,500 in a savings account. (Calculator) Compound interest is paid at a fixed rate each year. After 2 years the investment is worth £21,175. Work out the annual rate of interest.	