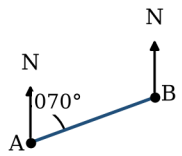
Day 364 **A Tier 10-a-day**

1 The bearing of B from A is 070°.
Work out the bearing of A from B.
The diagram is not drawn accurately.

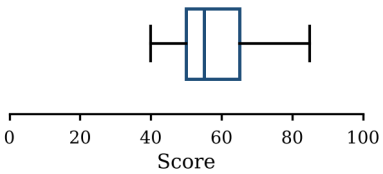


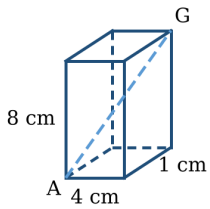
2 Work out $(7.5 \times 10^9) \times (2.5 \times 10^3)$
Give your answer in standard form.

3 Solve the simultaneous equations
$5x + 2y = 9$
$3x - 3y = 18$

4 Ben invests £7,500 in an investment bond. (Calculator)
The account pays compound interest at 3% per year.
Work out the total interest earned after 3 years.

5 The box plot shows the scores of the students in Class A in a test.
(a) Write down the median and the interquartile range.
For Class B the median is 45 and the interquartile range is 5.
(b) Compare the distributions of the two classes.



Day 364	A Tier 10-a-day
6 Solve $5^x = 25$	
7 Femi invests £8000 in a savings account. (Calculator) The account pays compound interest at a fixed rate each year. After 2 years there is £8652.80 in the account. Work out the annual rate of interest.	
8 The diagram shows a cuboid. Work out the length of the diagonal AG. The diagram is not drawn accurately. 	
9 A is the point (0, −1) and B is the point (8, 1). Find the equation of the perpendicular bisector of AB.	
10 Ali buys a second-hand car for £20. He sells it for £29. Work out his percentage profit.	