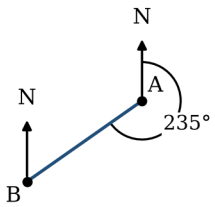
Day 191	A Tier 10-a-day
1 A shop sells flour in 3 different sizes. Small bag: 250 g for £1.60 Medium bag: 400 g for £2.60 Large bag: 500 g for £3.40 Which bag is the best value for money? You must show your working.	
2 Solve $-6(x - 2) = -2(x + 7) - 2$	
3 The bearing of B from A is 235°. Work out the bearing of A from B. The diagram is not drawn accurately. 	
4 A cyclist rides 78 km at 24 km/h. Work out the time taken. Give your answer in hours and minutes.	
5 A jug holds $10\frac{1}{5}$ litres of juice. Glasses hold $\frac{3}{5}$ litre each. How many glasses can be filled completely?	

Day 191 **A Tier 10-a-day**

6 $x_{n+1} = 5 + \frac{2}{x_n}$

$x_0 = 3$

Work out the values of x_1, x_2 and x_3.

Give your answers correct to 3 decimal places.

(Calculator)

7 The table gives information about 80 measurements.

A histogram is drawn using this information.

(a) Work out the missing frequency.

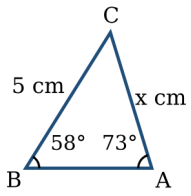
(b) Work out the height of the bar for the class $30 < l \leq 40$.

Length, l (mm)	Frequency
$10 < l \leq 25$	27
$25 < l \leq 30$	?
$30 < l \leq 40$	18
$40 < l \leq 50$	22

8 Work out the value of x. (Calculator)

Give your answer to 3 significant figures.

The diagram is not drawn accurately.



9 Solve $\frac{3}{(x-2)} + \frac{2}{(x-4)} = 1$

10 One grain of sand has a mass of 1.2×10^{-6} kg.

A sample contains 5×10^{9} grains of sand.

Work out the total mass of the sample.

Give your answer in standard form.