Day 104 **B Tier 10-a-day**

1 Here are the number of minutes Tara waited for a bus.
8, 15, 6, 11, 15, 14
Work out the mean.

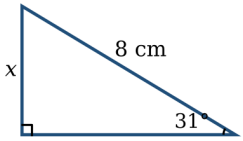
2 Here is a list of numbers.
44, 92, 25, 20, 91, 18, 47, 80
From the list, write down
(a) a factor of 60
(b) a square number

3 The table shows the probabilities of a biased dice landing on each colour.
(a) Work out the value of x.
(b) The biased dice is used 40 times. How many times would you expect B?

Colour	A	B	C	D
Probability	0.4	0.25	x	0.2

4 Solve $\frac{5x}{3} + 1 = 11$

5 A block exerts a force of 40 N and causes a pressure of 8 N/m^2.
Work out the area in contact with the ground.

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6 $A = 2^2 \times 5$ $B = 2^3 \times 7^2$ Write down, as a product of prime factors, (a) the HCF of A and B (b) the LCM of A and B	
7 Find the length of x. (Calculator) Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
8 A shop sells pens and pencils. All pens cost the same and all pencils cost the same. 4 pens and 1 pencil cost 335p. 2 pens and 1 pencil cost 175p. Work out the cost of one pen and the cost of one pencil.	
9 A cone has base radius 8 m and vertical height 10 m. (Calculator) Volume of a cone = $\frac{1}{3}\pi r^2 h$ Work out the volume of the cone. Give your answer correct to 1 decimal place.	
10 Mohammed has $\frac{1}{2}$ of £28. Uma has 35% of £240. Who has more money? You must show your working.	