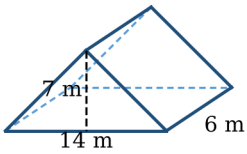
Day 293 **B Tier 10-a-day**

1 The ratio of red to blue among the counters in a bag is 5 : 4.
There are 8 blue.
How many red are there?

2 Solve $3x + 6 \leq 24$

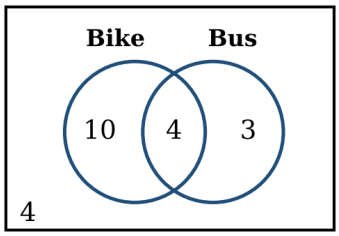
3 Here is a prism.
Its cross-section is an isosceles triangle.
Calculate the volume of the prism.
The diagram is not drawn accurately.



4 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 200 times. How many times would you expect A?

Colour	A	B	C	D
Probability	0.15	0.25	x	0.1

5 A new van costs £15,500. (Calculator)
Its value falls by 4% each year.
Work out its value after 3 years.
Give your answer to the nearest pound.

Day 293	B Tier 10-a-day
6 The Venn diagram shows information about 21 workers in an office. One of them is chosen at random. Find the probability that the person chose both Bike and Bus.  	
7 A drum has radius 9 m and height 8 m. (Calculator) It is closed. Work out the total outside surface area. Give your answer correct to 1 decimal place.	
8 A theme park sells adult tickets and child tickets. 2 adult tickets and 2 child tickets cost £30. 1 adult ticket and 2 child tickets cost £19. Work out the cost of one adult ticket and the cost of one child ticket.	
9 A is the point $(-5, -5)$ and B is the point $(-3, -2)$. (Calculator) (a) Work out the coordinates of the midpoint of AB. (b) Work out the length of AB. Give your answer correct to 1 decimal place.	
10 In a sale, all prices are reduced by 35%. (Calculator) A bike costs £78 in the sale. Work out the original price of the bike.	