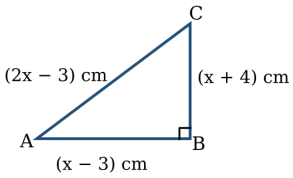
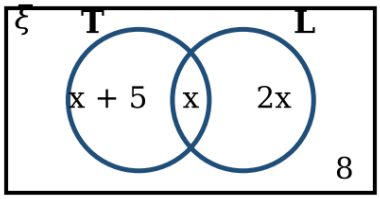
Day 336	S Tier 10-a-day
1 Hire Shop A has a delivery charge of £5 plus £5.50 per day. Hire Shop B has a delivery charge of £23 plus £2.50 per day. (a) Work out the number of days for which the two costs are the same. (b) Which is cheaper for 11 days, and by how much?	
2 A machine was bought for £1,600. Each year its value decreases by the same percentage. After 2 years it is worth £400. Work out the percentage decrease each year.	
3 Factorise fully $(x + 4)^2 - 81$	
4 Work out $(5.4 \times 10^{-2}) + (8.1 \times 10^{-5})$ Give your answer in standard form.	
5 A and B are the points $(-2, 8)$ and $(-10, 12)$. AB is a diameter of a circle. Find an equation of the circle.	

Day 336	S Tier 10-a-day
6 The ratio of blue to green sweets in a tin is 9 : 4. Then $\frac{1}{3}$ of the blue and $\frac{1}{5}$ of the green are taken out. Work out the ratio of blue to green now.	
7 The area of a circle is 93 cm^2, correct to the nearest cm^2. Work out the lower bound of the radius of the circle. Give your answer correct to 3 significant figures. (Calculator)	
8 ABC is a right-angled triangle with sides $(x - 3)$ cm, $(x + 4)$ cm and $(2x - 3)$ cm. The longest side is $(2x - 3)$ cm. (a) Find the value of x. (b) Work out the area of the triangle. The diagram is not drawn accurately. 	
9 The Venn diagram shows how many of 49 students have a tablet (T) or a laptop (L). (a) Work out the value of x. (b) A student is chosen at random from those who have a laptop. Work out the probability that this student also has a tablet. 	
10 ABCD is a rectangle with AB = 16 cm and AD = 14 cm. A point P inside the rectangle is such that AP ≤ 10 cm and P is nearer to AB than to AD. Work out the area of the region in which P can lie. Give your answer in terms of π.	