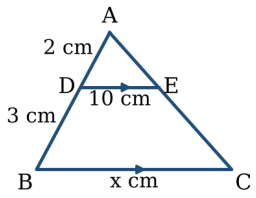
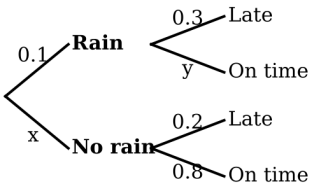
Day 249	A Tier 10-a-day
1 (a) Between which two consecutive whole numbers does $\sqrt{99}$ lie? (b) Work out $\sqrt{49} \times \sqrt[3]{8}$	
2 AB is a straight line of length 5 cm. A point P moves so that it is always less than 3 cm from the point A. Describe the region where P can be.	
3 Solve $-2x - 9 < 2$	
4 In triangle ABC, DE is parallel to BC. D is on AB and E is on AC. Work out the value of x. The diagram is not drawn accurately. 	
5 Make v the subject of $E = \frac{1}{2}mv^2$	

Day 249	A Tier 10-a-day
6 The tree diagram shows probabilities for two events. (a) Work out the values of x and y. (b) Work out the probability of rain and late.  	
7 Rationalise the denominator of $\frac{9}{\sqrt{20}}$ Give your answer in its simplest form.	
8 The mean of the five numbers 21, 2, x, 19, 24 is 16. Work out the value of x.	
9 (a) Write 40 and 28 as products of prime factors. (b) Find the highest common factor (HCF) and the lowest common multiple (LCM) of 40 and 28.	
10 Expand and simplify $(x + 2)(2x + 5)(x - 2)$	