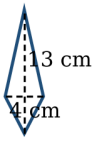
Day 84	A Tier 10-a-day
1 Write these numbers in order of size, starting with the smallest. $\frac{3}{20}$ 0.64 61% 0.87	
2 A rectangle has length (2x + 7) cm and width (2x + 5) cm. The perimeter of the rectangle is 112 cm. (a) Work out the value of x. (b) Work out the area of the rectangle.	
3 (a) Solve $-7 \leq 4x - 3 \leq 21$ (b) Write down all the integer values of x that satisfy this inequality.	
4 Work out $\sqrt{5.2^2 + 5.1^2}$ (Calculator) Give your answer correct to 3 significant figures.	
5 A café offers 5 starters, 7 main courses and 4 desserts. A meal is one starter, one main course and one dessert. (a) How many different meals are possible? (b) Hana picks her meal at random. Write down the probability that she picks her favourite meal.	

Day 84	A Tier 10-a-day
6 The diagram shows a kite. The diagonals are 4 cm and 13 cm and cross at right angles. Work out the area of the kite. The diagram is not drawn accurately.  	
7 Expand and simplify $(x + 2)(3x - 1)(x + 5)$	
8 The value of an investment grows by 4% each year. (Calculator) After 2 years it is worth £43,264. Work out its value at the start.	
9 Amy invests £5000 in a savings account. (Calculator) The account pays compound interest at a fixed rate each year. After 2 years there is £6272 in the account. Work out the annual rate of interest.	
10 Ship A sails 20 km from a port on a bearing of 200°. Ship B sails 19 km from the same port on a bearing of 280°. (Calculator) Work out the distance between the two ships. Give your answer to 3 significant figures.	