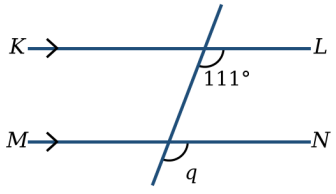
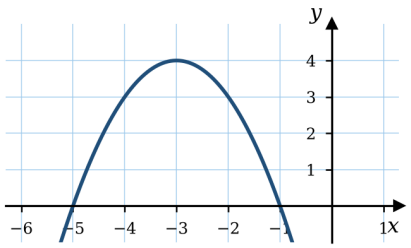
Day 167	B Tier 10-a-day
1 x is an integer. Write down the smallest value of x for which x > 5.4	
2 A pot contains 9 black pens and 3 blue pens. One is taken at random. Find the probability that it is not black.	
3 Work out (a) 5.1 × 0.7 (b) 0.32 × 3	
4 In the diagram, KL is parallel to MN. (a) Work out the size of angle q. (b) Give a reason for your answer. The diagram is not drawn accurately. 	
5 Work out the value of this expression. (Calculator) $\frac{3.3 + 3.3}{7.8 \times 8}$ Give your answer correct to 3 significant figures.	

Day 167	B Tier 10-a-day
6 The angles of a triangle are x°, 4x° and (4x + 18)°. Work out the size of the largest angle.	
7 A cone has base radius 9 cm and vertical height 9 cm. (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.	
8 A coat costs £200. In a sale the price is reduced by 10%. (a) Work out the new price. (b) A car is worth £2500. Its value goes down by 10% in a year. Work out its new value.	
9 The diagram shows the graph of $y = -x^2 - 6x - 5$ (a) Write down the solutions of $-x^2 - 6x - 5 = 0$ (b) Write down the coordinates of the maximum point of the graph. 	
10 There are 300 bus passengers. $\frac{3}{10}$ of them are adults and the rest are children. $\frac{2}{5}$ of the adults and $\frac{1}{5}$ of the children have a pass. One person is chosen at random. Work out the probability that they have a pass.	