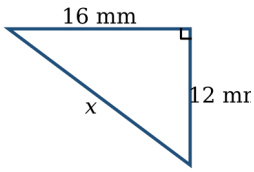
Day 63 **B Tier 10-a-day**

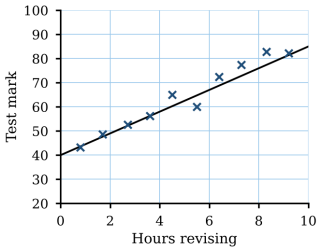
1 Calculate the length of x.
The diagram is not drawn accurately.



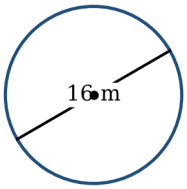
2 Simplify fully
(a) $3x \times 4x$
(b) $20mn \div 4m$

3 (a) Write down the number of lines of symmetry of a regular nonagon.
(b) Write down the order of rotational symmetry of a regular nonagon.

4 The scatter graph shows information about hours revising and test mark.
A line of best fit is drawn.
(a) Describe the correlation.
(b) Use the line of best fit to estimate the test mark when hours revising is 4.



5 $y = 3x^2 + 5x - 8$
Work out the value of y when $x = -2$

Day 63	B Tier 10-a-day
6 A bus travels 168 km at an average speed of 48 km/h. How long does the journey take? Give your answer in hours and minutes.	
7 In a sale, all prices are reduced by 30%. (Calculator) A jacket costs £210 in the sale. Work out the original price of the jacket.	
8 A theme park sells adult tickets and child tickets. 1 adult ticket and 3 child tickets cost £22. 2 adult tickets and 3 child tickets cost £32. Work out the cost of one adult ticket and the cost of one child ticket.	
9 The diagram shows a circle with diameter 16 m. (Calculator) Work out the area of the circle. Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
10 The length of a rectangle is 19 cm and its width is 30 cm. Both measurements are correct to the nearest cm. Work out the lower bound for the area of the rectangle.	