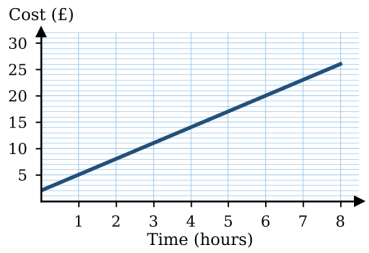
Day 236 **B Tier 10-a-day**

1 Write down the number of edges and vertices of a hexagonal prism.

2 The table shows the probabilities of a spinner landing on each colour.
(a) Work out the value of x.
(b) The spinner is used 200 times. How many times would you expect Red?

Colour	Red	Blue	Green	Yellow
Probability	0.35	x	0.25	0.1

3 A company hires out bikes. There is a fixed charge plus a cost for each hour.
The graph shows the total cost.
(a) Write down the fixed charge.
(b) Work out the cost for each hour.



4 Town A has a population density of 250 people per km^2.
Its area is 5 km^2.
Work out its population.

5 A straight line has gradient -4 and passes through the point $(-3, 3)$.
Find the equation of the line.

Day 236	B Tier 10-a-day
6 An open box (no lid) is a cuboid measuring 5 cm by 9 cm by 4 cm. The base is 5 cm by 9 cm. Work out the total area of card needed to make the box.	
7 F is directly proportional to m. When m = 2, F = 1. Find the value of F when m = 5.	
8 A theme park sells adult tickets and child tickets. 4 adult tickets and 2 child tickets cost £46. 2 adult tickets and 2 child tickets cost £30. Work out the cost of one adult ticket and the cost of one child ticket.	
9 In a sale, the price of a sofa is reduced by 50%. (Calculator) Two weeks later it is reduced by a further 50% of the new price. The final price is £12.50. Work out the original price of the sofa.	
10 Owen invests £500 in a savings account. (Calculator) The account pays 4% compound interest per year. Work out the amount in the account after 2 years. Give your answer to the nearest penny.	