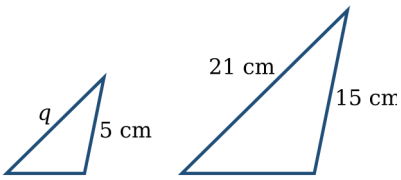
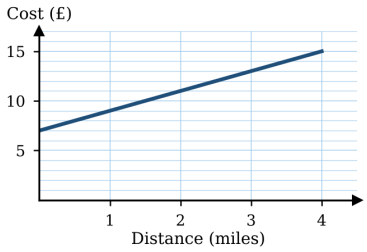
Day 187	B Tier 10-a-day
1 Sophie buys 5 pens at 25p each and 4 bottles of juice at £1.65 each. She pays with a £50 note. Work out how much change she gets.	
2 Simplify fully (a) $a^5 \div a^2$ (b) $p^2 \times p^3$	
3 Tom invests £2,000 for 2 years at 4% simple interest per year. Work out the total interest he earns.	
4 Farah has $\frac{3}{5}$ of £20. Owen has 60% of £180. Who has more money? You must show your working.	
5 The two triangles are similar. (a) Write down the scale factor of the enlargement from the smaller triangle to the larger triangle. (b) Work out the value of q. The diagram is not drawn accurately. 	

Day 187 **B Tier 10-a-day**

6 A taxi firm charges a fixed amount plus a cost for each mile.
The graph shows the total cost.
(a) Write down the fixed charge.
(b) Work out the cost for each mile.



7 A scooter leaves at 7:40 am.
It travels 72 km at an average speed of 24 km/h.
At what time does it arrive?

8 Here are the first four terms of a sequence.
1, 2, 4, 8
(a) Write down the next two terms.
(b) Describe the rule for continuing the sequence.

9 In a sale, the price of a sofa is reduced by 25%. (Calculator)
Two weeks later it is reduced by a further 25% of the new price.
The final price is £112.50.
Work out the original price of the sofa.

10 PA and PB are tangents to a circle, centre O.
Angle APB = 72°.
Work out the size of angle PAB, marked p.
Give a reason for your answer.
The diagram is not drawn accurately.

