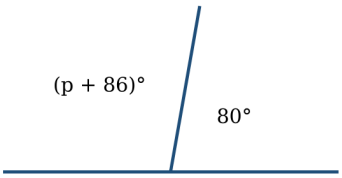
Day 338 **B Tier 10-a-day**

1 The diagram shows 2 angles on a straight line.
Work out the value of p.
The diagram is not drawn accurately.

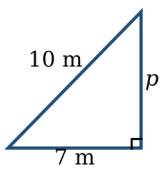


2 36 households were asked.
24 of them have a cat and 14 of them have a dog.
8 of them did both.
(a) How many did neither?
(b) One is chosen at random. Find the probability that they have a cat but do not have a dog.

3 Does the point (7, −8) lie on the line $y = -x - 3$?
You must show your working.

4 A boat leaves at 8:15 am.
It travels 36 km at an average speed of 18 km/h.
At what time does it arrive?

5 Calculate the length of p. (Calculator)
Give your answer correct to 1 decimal place.
The diagram is not drawn accurately.



Day 338	B Tier 10-a-day
6 Zara bought a guitar for £400 and sold it for £160. Work out the percentage loss.	
7 The area of a circle is 159 m^2. (Calculator) Work out the radius of the circle. Give your answer correct to 1 decimal place.	
8 Solve $x^2 - 4x = 0$	
9 There are 6.7×10^2 fish in a lake. The number doubles every day. How many are there after 3 days? Give your answer in standard form.	
10 In a sale, the price of a sofa is reduced by 20%. (Calculator) Two weeks later it is reduced by a further 50% of the new price. The final price is £80. Work out the original price of the sofa.	