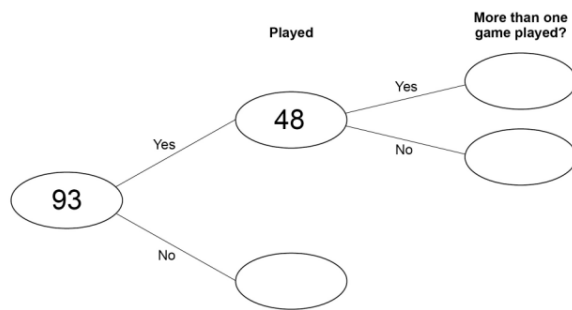


OCR GCSE Mathematics Calculator 2023 Foundation Paper 2 Revision Worksheet

Question 8

93 people were asked if they played online games one day. The frequency tree shows some information about their answers.



8 (a) 75% of the people who answered Yes played one game. Complete the frequency tree.

8 (b) One of the 93 people is chosen at random.

P(used social media) is more than 0.68

What is the smallest possible number of people who used social media?

Question 9

9 (a) The cost of a TV streaming service is £6 per month for the first 4 months, then £11 per month for the rest of the year. **Work out the total cost for the year.**

9 (b) A TV series has ten episodes. Nine episodes are each 50 minutes long. One episode is 1 hour 42 minutes long. Work out the **total** length of the series. **Give your answer in hours and minutes.**

Question 10

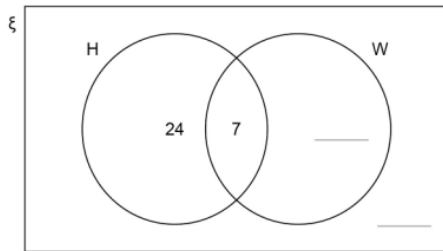
10 (a) There are 1020 books in a box. $\frac{2}{5}$ of the books are blue. How many are blue?

10 (b) There are green pens and red pens in the box. The ratio of green : red is 4 : 3.
What fraction of the pens are green?

10 (c) There are some calculators in the box. 220 are scientific. 30 are not.
What percentage of the calculators are scientific?

Question 11

Here is a Venn diagram. $\xi = 60$ people. H = people who own a gaming headset. W = people who own a smart watch.



11 (a) 15 of the people own a smart watch. Complete the Venn diagram.

11 (b) One of the 60 people is chosen at random. What is the probability that they own **both** a gaming headset and a smart watch?

11 (c) Marek is going to buy a gaming headset that costs £35. He already has £19. He plans to save the rest in two equal amounts over the next two weeks. He uses this method to work out in pounds how much to save each week:

$$35 - 19 \div 2$$

What is wrong with his method?

Question 12

Kai says that $3 : 2$ is an equivalent ratio to $9 : 6$.

Jo says that $1.5 : 1$ is an equivalent ratio to $9 : 6$. Who is correct? Tick one.

- Both of them
- Kai only
- Jo only
- Neither of them

Give reasons for your answer.

Question 13

28 is increased by 25%. 40 is decreased by 15%. Which answer is bigger? **Show how you decide.**

Question 14

Factorise $12a + 15b$.