

Question of the day

Day 8



In a group of 100 students

- 59 study History (H)
 - 62 study Geography (G)
 - 20 do not study either subject.
- $$\left. \begin{array}{l} 59 \\ 62 \\ \hline 121 \end{array} \right\} = \frac{59}{62} + \text{History \& Geography}$$

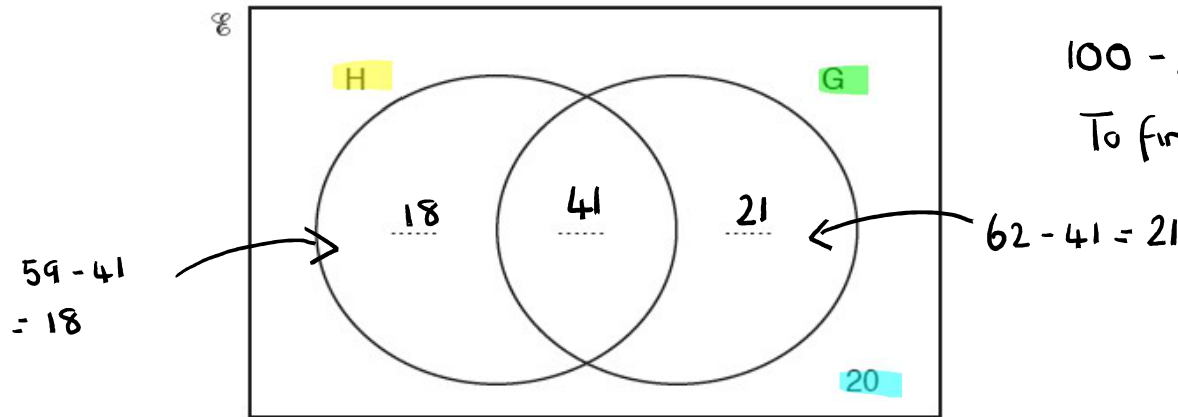
The 4 sections of the venn diagram need to add to 100.

Start by subtracting the number that do not study either.

$$100 - 20 = 80 \text{ (the amount in the Venn diagram)}$$

$$\text{To find the centre } 121 - 80 = 41$$

(a) Complete the Venn diagram.



[3]

(b) One of the 100 students is selected at random.

Find the probability that this student studies exactly one of the two subjects.

$$P(\text{history only}) \text{ or } P(\text{Geography only})$$

$$= 18 + 21$$

(b) $\frac{39}{100}$ [2]