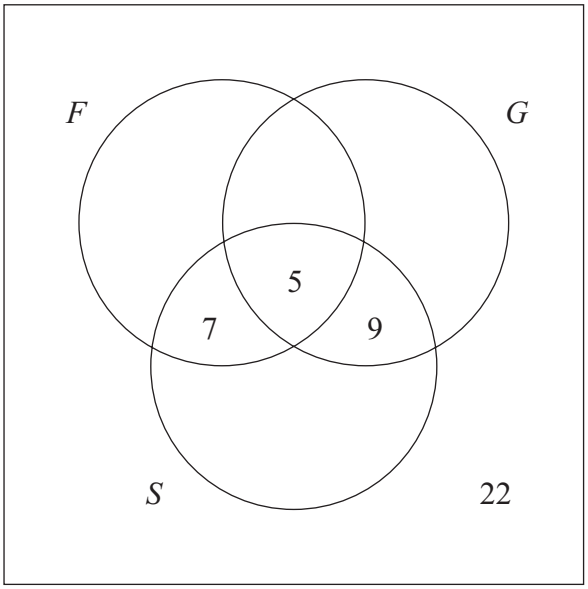
3. In a survey 120 people were each asked which of the countries France (F), Germany (G) and Spain (S) they had visited.

The incomplete Venn diagram gives some information about the results of the survey.



A person from the survey is chosen at random.

(a) Find the probability that

(i) of these three countries, this person only visited France and Spain,

(ii) this person did not visit any of these three countries.

(2)

Given that

- of the 52 people who had visited France, 9 also visited Germany
- $\mathrm{P}(F \cup G) = \dfrac{41}{60}$

(b) complete the Venn diagram.

(4)

(c) Find

(i) $\mathrm{P}(F' \cap G')$

(ii) $\mathrm{P}(F \cap G \,|\, S)$

(3)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
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Question 3 continued

(Total for Question 3 is 9 marks)