

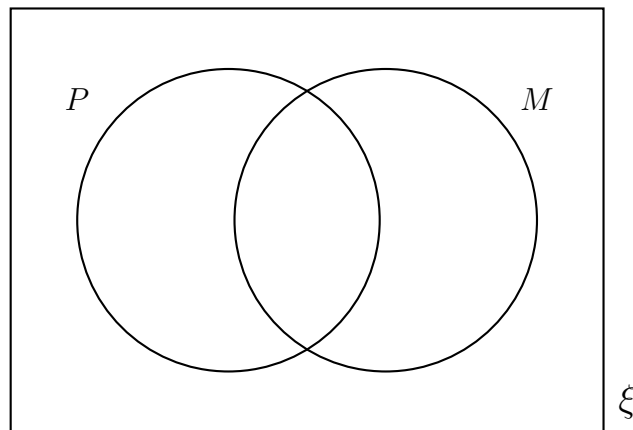
1. Bandele recorded the orders of 53 customers in a cafe.

25 customers order mash

17 customers order both pie and mash

27 customers order pie or mash or both

Complete this Venn diagram to show the number of customers who order pie, P and the number of customers who order mash, M .



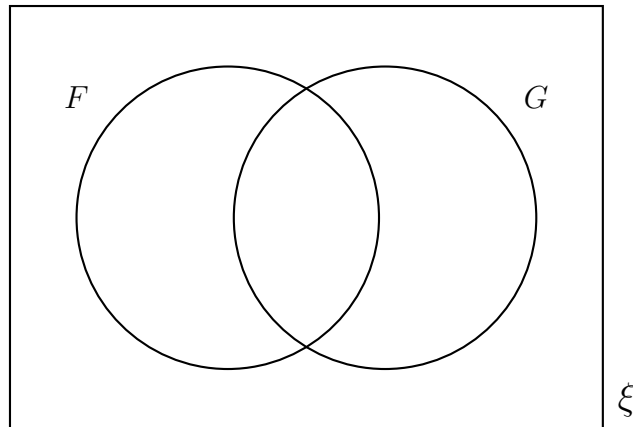
2. Ms Hart asked the 150 year 9 students in her year group what options they plan to take
She finds out that

45 year 9 students plan to take French

35 year 9 students plan to take geography

11 year 9 students plan to take both French and geography

- (a) Complete this Venn diagram to show the numbers of students planning to take French, F and geography, G .



- (b) How many students in Ms Hart's plan to take neither french nor geography.

(b)

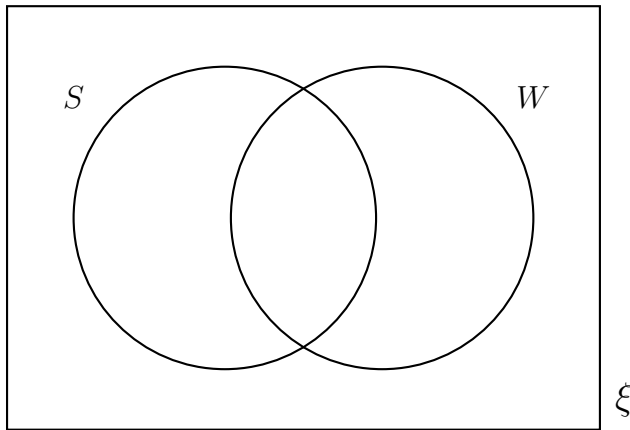
3. Fearne carried out a survey of 98 visitors in a water park to find out how many visitors go on the water slide, S and how many visitors go on the wave machine, W .

71 visitors go on the wave machine

56 visitors go on the both the water slide and the wave machine

90 visitors go on the water slide or the wave machine or both

Complete this Venn diagram to show Fearne's data.



Answers

$$\begin{aligned} 1. P \cap M' &= \{2\} \\ P \cap M &= \{17\} \\ P' \cap M &= \{8\} \\ P' \cap M' &= \{26\} \end{aligned}$$

$$\begin{aligned} 2. F \cap G' &= \{34\} \\ F \cap G &= \{11\} \\ F' \cap G &= \{24\} \\ F' \cap G' &= \{81\} \end{aligned}$$

(b) 81

$$\begin{aligned} 3. S \cap W' &= \{19\} \\ S \cap W &= \{56\} \\ S' \cap W &= \{15\} \\ S' \cap W' &= \{8\} \end{aligned}$$