

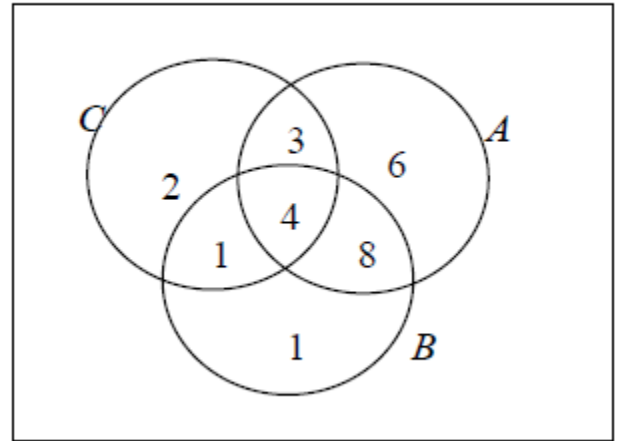
Venn Diagrams Worksheet

1. The Venn diagram shows the number of players at a sports club who take part in various sporting activities, where:

$A = \{\text{members who do archery}\};$
 $B = \{\text{members who play badminton}\};$
 $C = \{\text{members who take cross country}\};$

Find the number of members who:

- (a) take part in cross country;
- (b) take part in more than one activity;
- (c) play badminton but do not take part in cross country;
- (d) do not do archery.

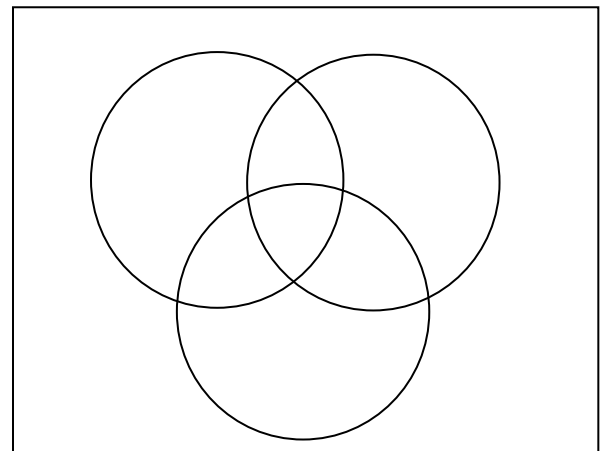


2. A poll was taken of the leisure time activities of 90 students.

60 students watch TV (T), 60 students read (R), 70 students go to the cinema (C).

26 students watch TV, read **and** go to the cinema.
 20 students watch TV and go to the cinema only.
 18 students read and go to the cinema only.
 10 students read and watch TV only.

- (a) Draw a Venn diagram to illustrate the above information.



- (b) Calculate how many students:

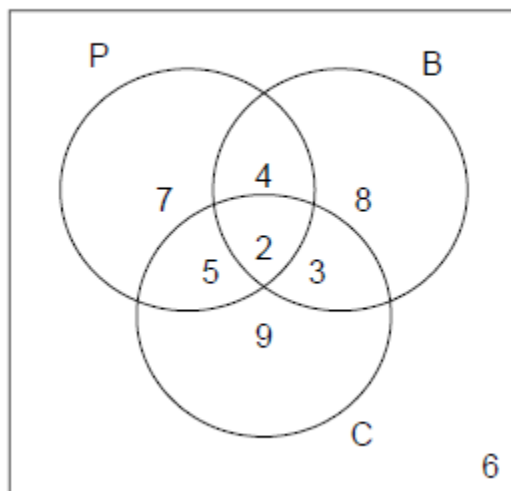
- (i) only watch TV;
- (ii) only go to the cinema.

3. The Venn diagram shows the numbers of pupils in a school according to whether they study the sciences: Physics (P), Chemistry (C) or Biology (B).

(a) Write down the number of pupils that study Chemistry only.

(b) Write down the number of pupils that study **exactly** two sciences.

(c) Write down the number of pupils that do not study Physics.



4. Suppose 135 students are surveyed about their favorite ice cream flavors. Draw a Venn Diagram in the box for the following statements, and then use it to answer the questions.

63 like Chocolate

61 like Caramel

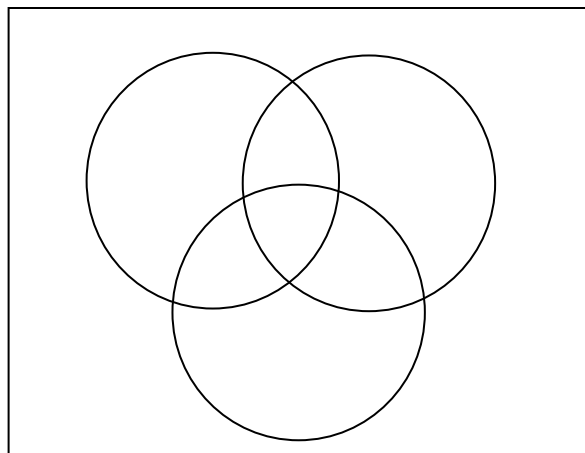
53 like Vanilla

28 like Caramel and Vanilla

31 like Chocolate and Caramel

22 like Chocolate and Vanilla

15 like all three flavors



How many students do NOT like any of the given flavors? _____

How many students like only Caramel? _____