

Name: Class:

Use venn diagrams to solve problems.

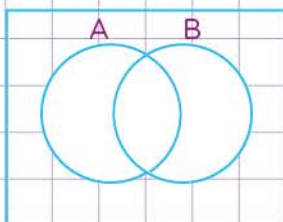
- a. In a class of 40 students, 17 students passed Biology, 13 students passed Mathematics, 10 students passed both Biology and mathematics. How many students passed in Biology only? Use Venn diagram to help you solve the problem.
- b. Charles is celebrating his birthday. 5 of the kids who attended his birthday party have been to Kenya and 10 have been to London. 3 kids have been to both Kenya and London. How many kids have been to Kenya or London or both? Use Venn diagram to help you solve the problem.
- c. Ten of the nurses in the hospital where Clair works like to eat only fruits during lunch breaks. Fifteen of the nurses like to eat junk food. Seven of the nurses like to eat both fruits and junk food. How many nurses like to eat :
- Fruits only?
 - Both fruits and junk?
 - Junk food only?
- d. Some people in New Town were asked to name the sports they liked watching. A total of 2,897 people said they liked watching football, 1,478 said they liked watching basketball, and 876 said they liked watching tennis. Forty said they liked watching basketball, handball, and football. If 50 said they like watching basketball and football, 20 said they like watching handball and basketball, and 42 said they like watching handball and football,
- How many people like watching basketball only?
 - How many people like watching football only?
 - How many people like watching handball only?
- e. Fifty-eight people in New Town said they like watching volleyball, 63 like watching cricket, and 87 said they like watching tennis. If 24 said they like watching all the sports, 12 said they like watching tennis and cricket, 17 said they like watching tennis and volleyball,
- How many people like watching all the sports?
 - How many people like watching tennis and volleyball?
 - How many people like watching volleyball and cricket?
 - How many people like watching volleyball only?
 - How many people like watching tennis only?

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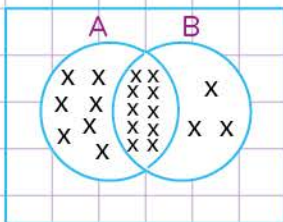
- a. In a class of 40 students, 17 students passed Biology, 13 students passed Mathematics, 10 students passed both Biology and Mathematics. How many students passed in Biology only? Use Venn diagram to help you solve the problem.

Let's first of all draw the venn diagram to solve the problem.



A = students who passed Biology.
B = Students who passed Mathematics.

10 students passed in both subjects. Let's put 10 crosses in the intersection of circles A and B.



17 students passed Biology, let's add 17 crosses in circle A.

13 students passed Mathematics, let's add 13 crosses in circle B.

Now, count the crosses that are in circle A but are not in circle B.

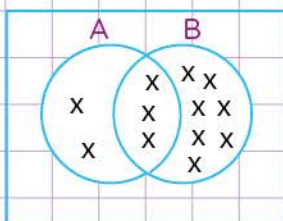
There are 7 crosses, So, 7 students passed Biology only.

- b. Last week, Charles celebrated his birthday. 5 of the kids who attended his birthday party had been to Kenya and 10 had been to London. 3 kids had been to both Kenya and London. How many kids had been to kenya or London or both? Use venn diagram to help you solve the problem.

A = Kids who have visited Kenya.

B = Kids who have visited London.

3 kids have been both to Kenya and London, Let's put 3 crosses in the intersection of A and B.



5 kids have been to Kenya, lets add 5 crosses in circle A.

10 kids have been to London, let's add 10 crosses in circle B.

Now, count the crosses that are in circle A, circle B and their intersection.

There are 12 crosses, So, 12 kids have been to Kenya or London or both.