KANOMBE SECONDARY SCHOOL/EFOTEC

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S1 MATHEMATICS EXERCIISES

1. In a survey of 40 students, 26 play football and 20 play volleyball. 17 students play both games. How many students play none of the games at all?
2. In a group of 20 girls, 16 play football, 12 play hockey, and 2 do not play either games. How many play both games?
3. In a survey of course preferences of 110 students in a senior six class, the following facts were discovered. 21 students like engineering only, 63 like engineering, 55 like medicine and 34 like none of the two courses.
   (a) Draw a Venn diagram to represent this information.
   (b) How many students like Engineering or Medicine?
   (c) How many students like Engineering and Medicine?
   (d) How many students like Medicine only?
4. A survey was carried out on 120 people about their breakfast habits. On a particular day, 55 ate eggs for breakfast that day and 40 drank juice while 25 took both eggs and drank juice for breakfast.
   (a) Represent the information on a Venn diagram.
   (b) How many people had nether eggs nor juice that morning?
5. A survey was done on 150 Rwandese about which newspapers they read. 83 read the New Times, 58 read the Montor,36 read neither of those two papers. How many people read both newspapers?

6. A survey was carried out on 50 people about the hotels they like for taking lunch from among Hilltop, Serena and Lemigo. It was found out that, 15 people ate at Hilltop, 30 people ate at Serena and Lemigo, 5 people ate at Hilltop, Serena and Lemigo.
   (a) Represent the information on a Venn diagram.
   (b) How many people ate at Hilltop only?
   (c) How many ate at Hilltop and Serena but no at Lemigo?
   (d) How many people did not eat from any of these three hotels?

7. A survey was carried out n a shop to find out how many customers bought bread, milk, both or neither. Out of a total of 79 customers for the day, 52 bought milk, 32 bought bread and 15 bought neither. Draw a Venn diagram to show this information and use it to find out:
   (a) How many bought bread and milk?
   (b) How many bought bread only?
   (c) How many bought milk only?

8. In a class the students are required to take part in at least two sports chosen from football, gymnastics and tennis. 9 students play football and gymnastics, 19 play foot ball and tennis,6 play all the three sports. If there were 30 students in the class, draw a Venn diagram to show the information. With the help of your diagram, find out how many students did not participate in any of the sports.

The end.