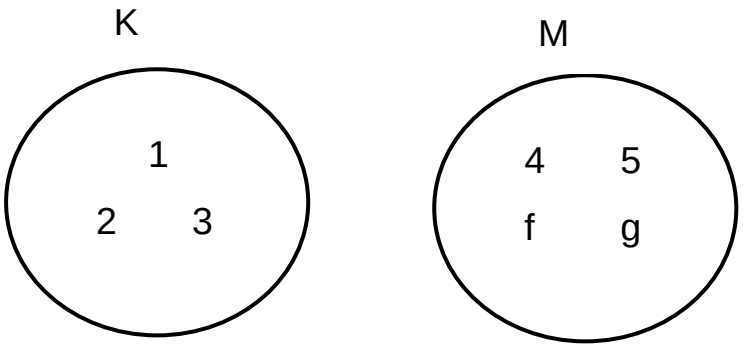
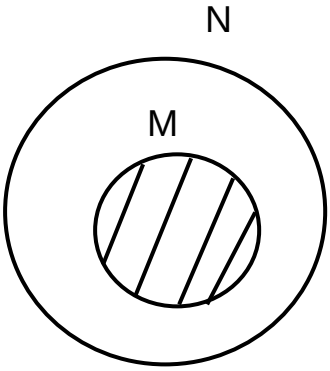
Activity nine

1. Set P ={a, e, i, o, u}
    a) Name Set P.
    b) Find ∩ (P).
2. Set K ={a, b, c, d} and Set P ={1, 2, 3, 4}.
   What is the relationship between set K and set P?
3.



   Describe the relationship between set K and set M?

4.



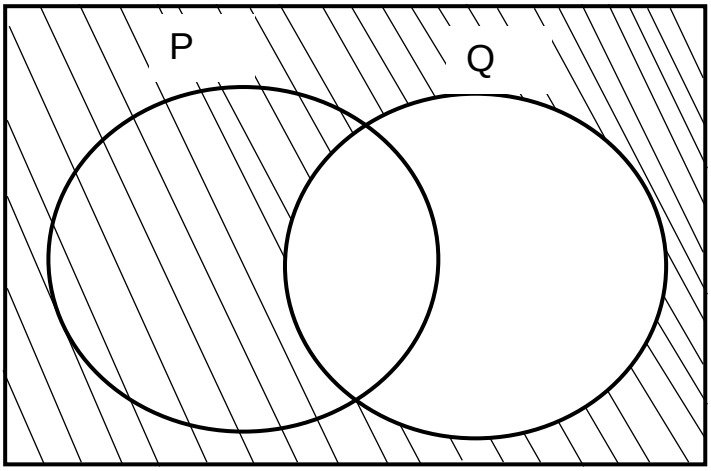
   Describe the shaded part.

5. Draw a venn diagram to show that all boys (B) are males (M).
6. Briefly explain the following terms as used in set concept.
    i) A set
    ii) Disjoint set
    iii) Subset
    iv) Proper subset
    v) Empty set
    vi) Equivalent set.
7. Given that set K= {2, 3, 5, 7, 11, 13, 17, 19}
    a) Describe the members of set P.

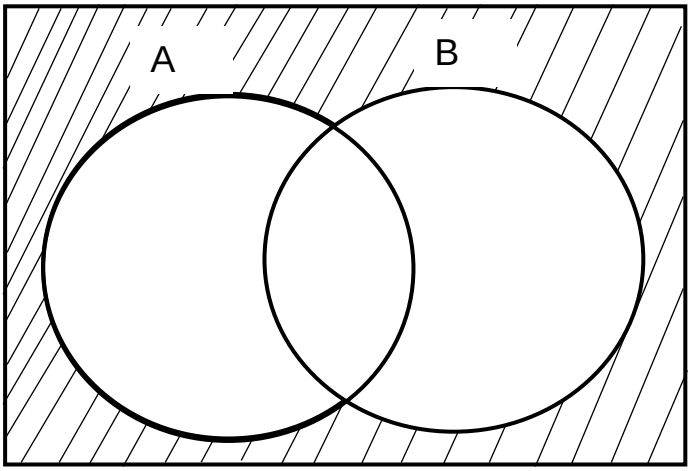
b) What is ∩ (P)?

8. Describe the shaded part

a)



b)



9. List the subset for each of the following sets.
   a) P = {Ø}
   b) K = {a, b}
   c) P = {z, y, k}
   d) M = {Moses, Ali, Ruth, Abbey}

10.
   a) Given that set A has 32 subsets, find the number of subsets in set A.
   b) Set P = {1, 2, 3}, how many proper subsets are in set P?

c) If the number of proper subsets in N is 127, how many elements are in set N?

d) If set P = {Ø}, how many proper subsets are in set P?

11. Given that set L = {K, l, b, o, n, e, t, a}, M= {d, a, n, l, e, j}

a) Draw and represent the above information on venn diagram.

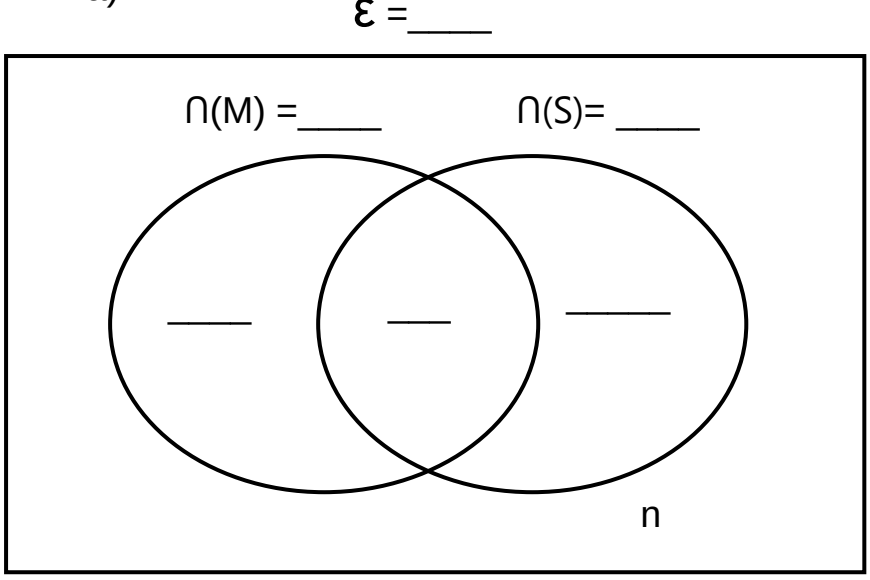
b) Find the number of subsets in L ∩ M.

12. Given that ∩ (A) =22, ∩ (B) =27, ∩ (A ∩ B) =12

Find ∩ (A U B).

13. The venn diagram represents a class of 70 pupils. Given that 44 pupils like Physics (P), 36 pupils like Geography (G) and 17 pupils like both subjects and n do not like any.

a)



b) Find the value of n.

c) How many like one subject?

14. In a class of 47 boys, 25 like Meat (M) only, P like Fish (F) 12 like both Meat and Fish while 3 boys like neither of the two.

a) Draw a venn diagram and represent the above information.

b) Find the value of P.

c) Find the probability of picking a boy who like one type of food.

15. In a class of 144 students (4y + 10) play Football (F) only, 65 play Tennis (T), y play both games while 5 play neither of the two games.

a) Draw a venn diagram and represent the above information.

b) Find the value of y.

c) Find the probability of picking a pupil who plays football.

16. In a group of 40 people. All of them play football (F). 9 play football only 15 play Tennis (T) and football, 25 go for swimming (S) and play football. Some enjoy all the three types of games.
    a) Draw a venn diagram to represent the above information.
    b) How many people play all the three games?
    c) How many people play only two games?

END