YUDESI NURSERY AND PRIMARY SCHOOL

P.6 MATHEMATICS HOLIDAY PACKAGE TERM 1, 2020

Name: _____ Stream: _____

SET CONCEPTS;

1. Name the type of set formed by the following sets.

a) Set A = {all factors of 6} and set B = {a, b, c, d}

b)

c) A set all of Crystal of sand around the shores of Lake Victoria.

d) A set of all boys in P.6 class at Yudesi Primary School.

e) A set of months that last for 32 days.

2a) Use a diagram to show that set X is a subset of set Y.

b) Show that all Boys (B) are Male (M) using a venn diagram.

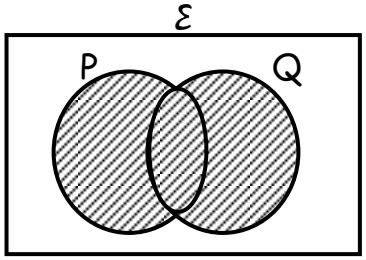
c) Draw a diagram to show that Plants (P) and Human beings (H) are living things (L).

d) Show that P∩R = R using a diagram.

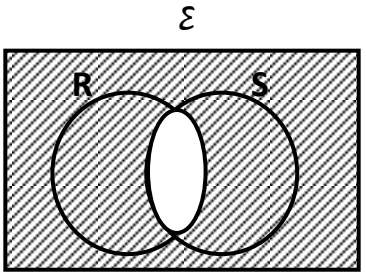
e) Use a diagram to show that E∪F = F.

3. Describe the shaded parts of the sets below.

i)

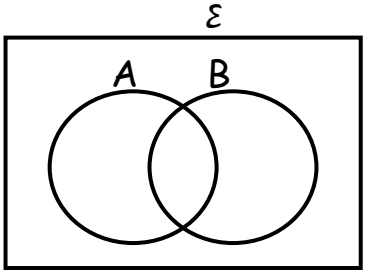


ii)

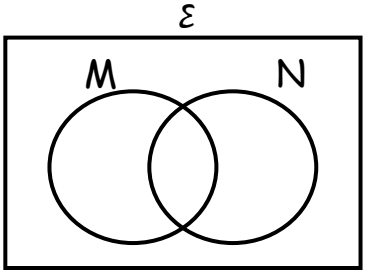


b) Shade the diagram below as instructed.

i) Complement of set B.

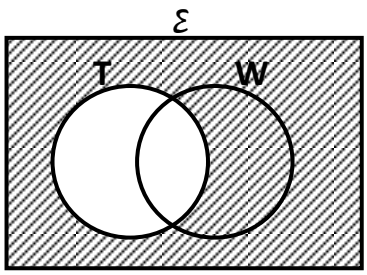


ii) (N – M)

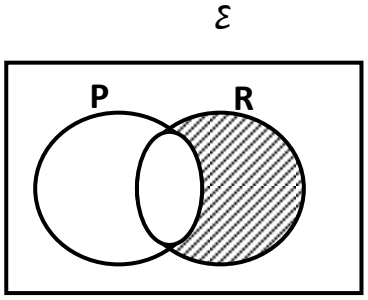


c) Describe the unshaded parts of the diagram below.

i)



ii)



4. If set K = {e, f, d}

a) List all the subsets of set K.

b) Given that P = {all factors of 15}. List all the proper subsets that can be formed from set P.

c) If set Q has five members, how many proper subsets can be obtained from set Q.

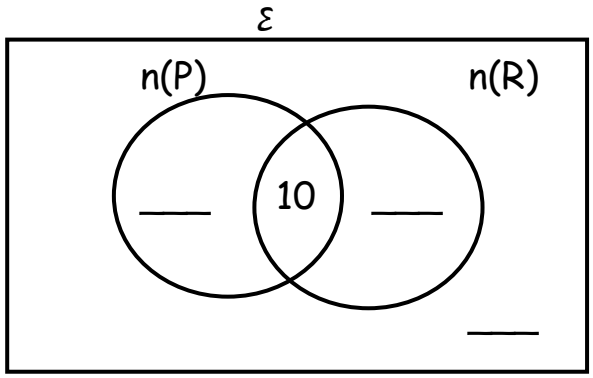
d) Given that A = {t, e, a, ch). How many subsets can be obtained from set A?

e) If set W has 16 subsets, how many members are in set W.

f) Given that R has 7 proper subsets, find n(R).

5. Given that $n(P - R) = 20$, $n(R - P) = 15$, $n(P \cap R) = 10$ and $n(P \cup R)' = 5$.

a) Complete the venn diagram below.

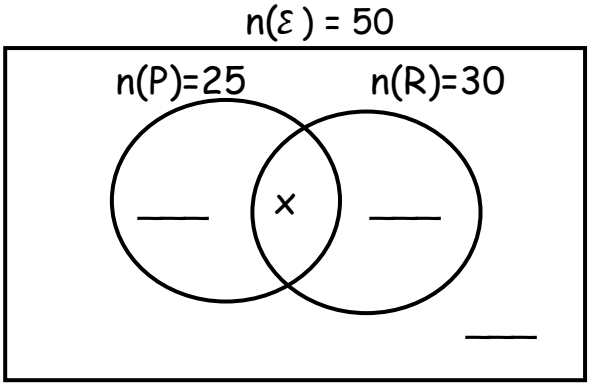


b) Find $n(P)'$

c) Find $n(R - P)'$

6. In a class of 50 pupils, 25 of them like Posho (P), 30 pupils like Beans (B), n pupils like both beans and posho whereas 7 pupils do not like any of the food mentioned.

a) Use the given information to complete the venn diagram below.



b) How many pupils like both posho and beans?

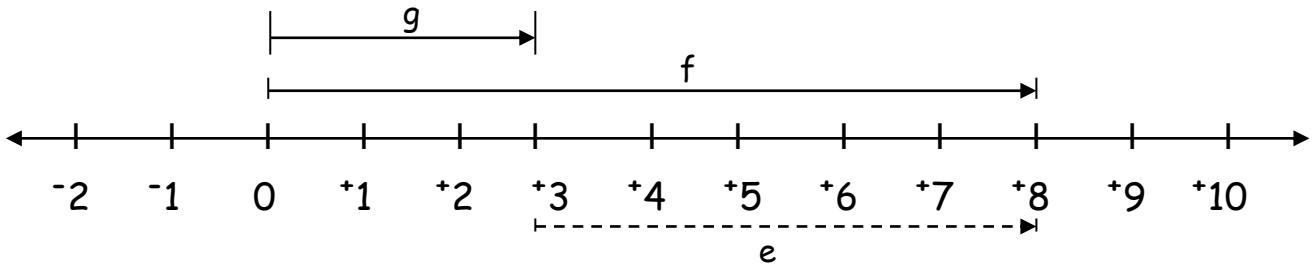
c) Find the number of pupils who like at least one type of food mentioned.

d) How many pupils like only one type of food?

e) What is the probability of picking at random a pupil who does not like posho?

INTEGERS;

7. Arrange $^{+}3$, $^{-}1$, 0, $^{-}4$ and +5 in ascending order.
8. Workout $^{+}7 - {}^{-}8 + {}^{-}9$
9. Use a number line to simplify $^{-}3 + {}^{-}4$
10. Workout $3 \times {}^{-}2$ using a number line.
11. Use the number line below to answer questions.



a) Name the arrows marked;

i) g = ii) e = iii) f =

b) Write the mathematical sentence shown on the number line.

12. Workout 4 + 6 + 5 = ___ (finite 7)
13. Simplify 3 – 7 = _____ (mod 9) using a dial.
14. Multiply 3 x 5 = ___ (finite 7)
15. Workout 4 ÷ 3 = _____ (finite 7)
16. Solve; 3y = 5 (finite 7)

17. If today is a Thursday, what day of the week will it be after 50 days?
18. Jane went to America and she came back after 80 days. If she came back on Wednesday, on which day of the week did she go?
19. It is 8a.m now. What time will it be after 70 hours?
20. My mother went to London in March. She is to spend there 60 months. In which month will she come back?
21. Kibuye was born in 18BC and died 27AD. For how long did he live?
22. The temperature of the `slope of a mountain was $^{-}12^{0}C$ in the morning. The temperature rose by $5^{0}C$ in the evening. What was the temperature the slope of the mountain in the evening?