

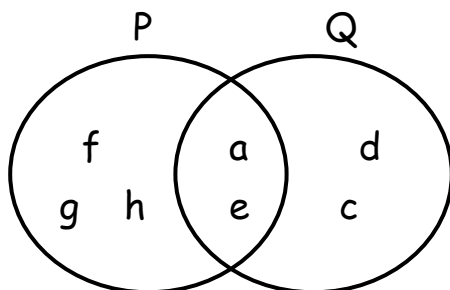
# YUDESI NURSERY AND PRIMARY SCHOOL

## P.7 MATHEMATICS HOLIDAY PACKAGE TERM 1, 2020

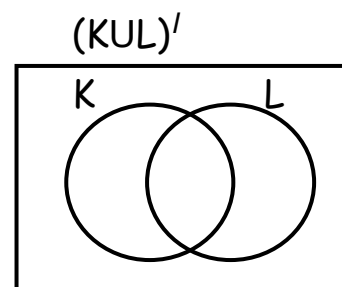
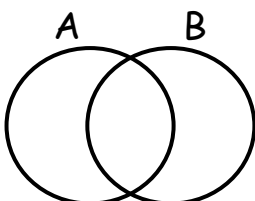
Name: \_\_\_\_\_ Stream: \_\_\_\_\_

### SET CONCEPTS;

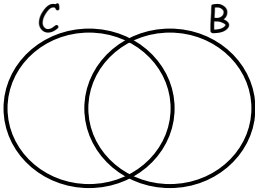
- Given that set  $A = \{\text{composite numbers less than } 20\}$ .  
List down members of set  $A$ .
- Given that set  $Q = \{a, e, i, o, u\}$ . Describe set  $Q$ .
- If set  $Y = \{e, f, g\}$ . List down all the subsets from set  $Y$ .
- Given that  $M = \{1, 2, 3, 4, e, f\}$ . How many subsets has set  $M$ .
- How many elements has a set with 128 subsets?
- Given that set  $R = \{n, m, o, p\}$ . How many proper subsets has set  $R$ ?
- Draw a venn diagram to show that all goats are Animals.
- Given set  $Q$  has 255 proper subsets. How many elements has set  $Q$ ?
- Study the venn diagram below carefully and use it to answer the following questions.



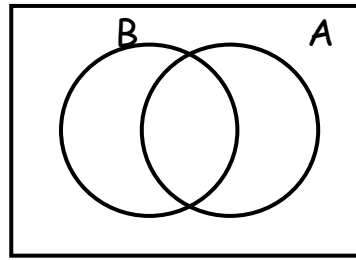
- List down members of set;
    - P
    - Q
  - What is
    - $n(P \cup Q)$
    - $n(P - Q)$
10. From the venn diagram given below shade;
- $A \cap B$
  - $(K \cup L)'$



ii) C only



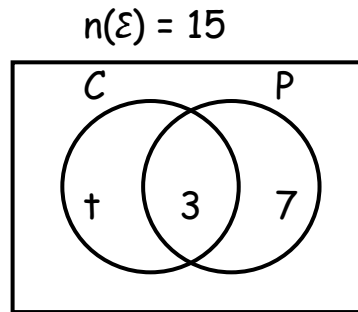
iv) B'



11. A die is tossed once, what is the probability of getting;

- a) even number on top?
- b) a number greater than 4?

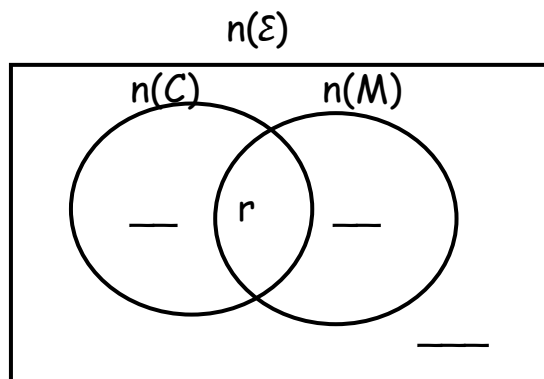
12. In a family of 15 members who prefer cassava (C) and Potatoes (P) as shown below. Study it carefully and use it to answer the following questions.



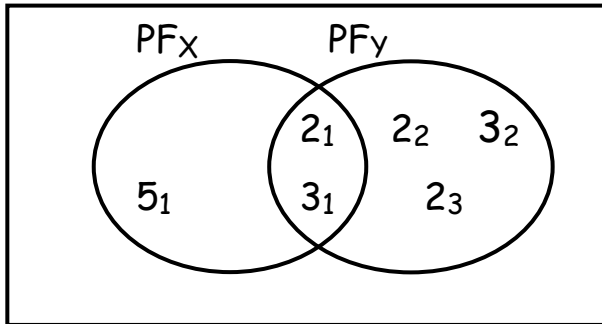
- a) Find the value of t.
- b) How many members eat only one type of food?
- c) If a member is picked at random, what is the probability of picking a member who likes eating only potatoes?

13. In a class of 40 farmers, 10 farmers grow Cassava (C) but not millet (M), 20 farmers grow Millet but not Cassava, r farmers grow both while 3 farmers grow neither of the crops.

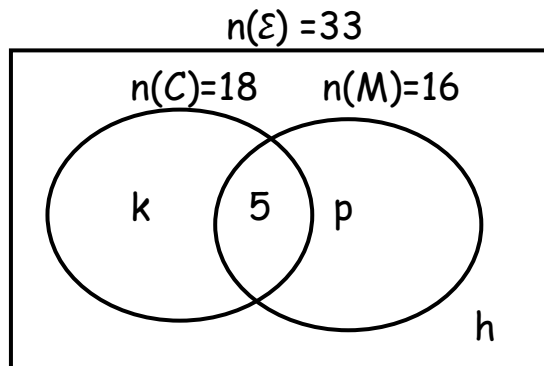
a) Represent the above information on the venn diagram below.



- b) Find the value of  $r$ .
- c) How many farmers grow only one type of crop?
14. The venn diagram below shows the prime factors of  $X$  and  $Y$ .



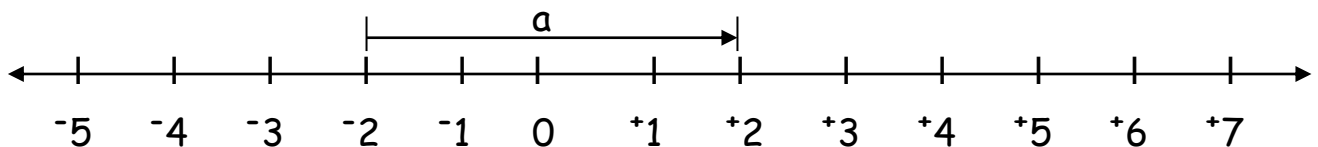
- a) Find the value of;
- i)  $X$                       ii)  $Y$
- b) Calculate the;
- i) G.C.F                      ii) L.C.M of  $X$  and  $Y$ .
15. Study the venn diagram below and use it to answer the following questions.



- a) Find the value of;
- i)  $k$                       ii)  $h$                       iii)  $p$

INTEGERS;

16. Find the additive inverse of  $-3t$ .
17. What integer is represented by the arrow on the number line below.



$a =$

18. Compare the following integers using  $>$ ,  $<$  or  $=$ .

a)  $6$  \_\_\_\_\_  $-12$

b)  $5$  \_\_\_\_\_  $-5$

c)  $-7$  \_\_\_\_\_  $-1$

d)  $+6$  \_\_\_\_\_  $6$

19. Arrange the following integers  $-3, 4, 5, -1, 0$  and  $-5$  in ascending order.

20. Simplify;

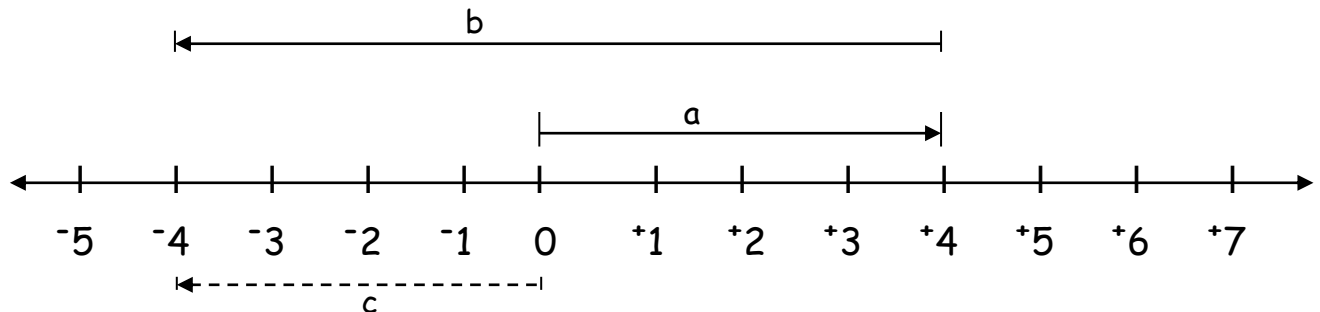
a)  $-6 + 12$

b)  $-3 - -7$

21. Workout  $-4 + 6$  using a number line.

22. Simplify  $-3 - -4$  using a number line.

23. Study the number line below and use it to answer the following questions.



a) Write down the integers represented by arrows marked;

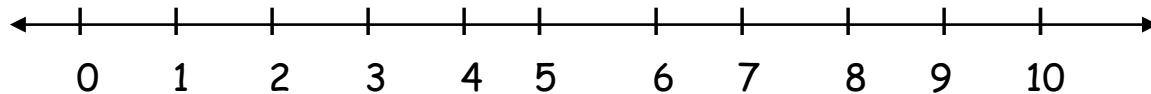
i)  $a =$

ii)  $b =$

iii)  $c =$

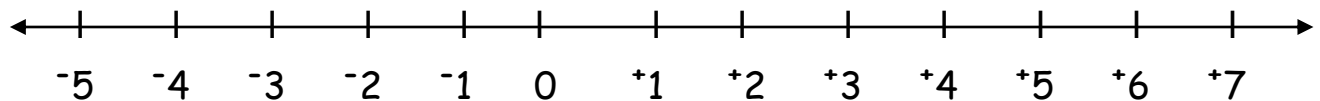
b) Write down the mathematical statement represented by the number line above.

24. Show the multiplication of  $3 \times 2$  on the number line below.



25. The temperature of a patient is  $37^{\circ}\text{C}$ , it raised by  $5^{\circ}\text{C}$ . What is the temperature of the patient?

26. Sandra moved 4 steps forward, 6 steps backward and 8 step forward. Find her position on the number line below.

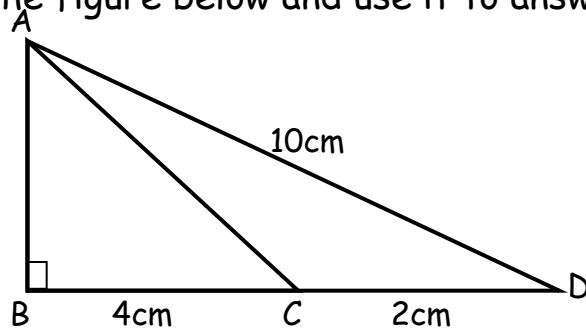


MEASURES:

27. Change  $2\frac{1}{5}$  hours to minutes.

28. Express 4 hours into seconds.

29. Express 2.5 tonnes to kg.
30. Convert 2500gms to kg
31. A birthday party ended at 8.51p.m. Express this time in a 24 hour clock system.
32. An examination of  $2\frac{1}{4}$  hours ended at 11:40a.m. At what time did it start?
33. A fuel pump attendant pumped fuel from AA342 to AA442.
- How many litres of fuel did a pump attendant sale?
  - If each litre of fuel was sold at sh.2800. How much money did he get?
34. The area of a circle is  $154\text{cm}^2$ . Calculate its circumference  $\left(\pi = \frac{22}{7}\right)$
35. A bus left Mbarara at 10:30a.m, moving at a steady speed of 60k/hr. If it reached Kasese at 1:30p.m.
- How long did the bus take to travel from Mbarara to Kasese?
  - How far is Kasese from Mbarara?
36. Express 90km/hr to m/s.
37. Study the figure below and use it to answer the following questions;



- Calculate the area of the shaded part.
  - Find the area of triangle ABC.
38. When marking a test, a teacher awarded 3 marks for every correct answer and deducted a mark for every wrong answer. The test had 20 questions.
- What is the score for a candidate who gets 15 correct answers?
  - How many questions did a candidate who got 52 marks get correct?
39. Solve the inequality and write down the solution set for the following;
- $4 - 3y = 16$
  - $4p + 2 < 14$
  - $6 + 4p < 8 + p$
40. Today is Wednesday, what day of the week will it be 48days from now?
41. Solve  $k - 4 = 3 \pmod{5}$