HILLSIDE PRIMARY SCHOOL NAALYA.

MOCK SET ONE. 2019

(1) Divide 6 by 3.

(2) Express 101_{two} in decimal base.

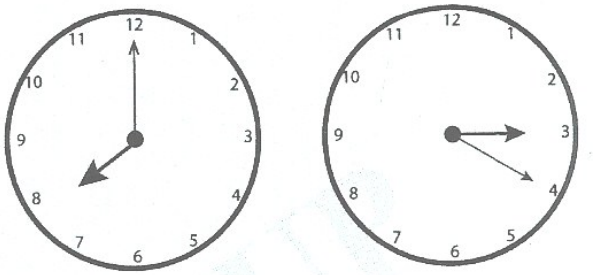
(3) If set A = {Prime numbers between 0 and 10}. How many subjects has set A?

4) Find the next number in the sequence:

10, 11, 15, 24, 40. _____.

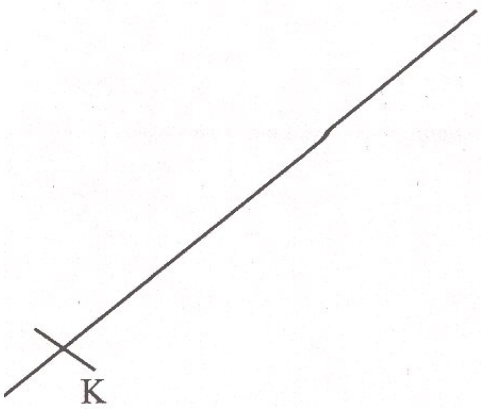
(5) The clocks show the time a school starts in the morning and finishes in the in the afternoon.

Start Finish



How long is the school day?

(6) Using a ruler, pencil and a pair of compasses only, construct an angle of 30^0 at point K.



(7) 7. Given that p = 5 and q = -8

Evaluate: $\frac{p - q}{q-p}$

(8) The cost of ½kg of rice is Sh.1200. What will be the cost?

6 ½ kg of rice?

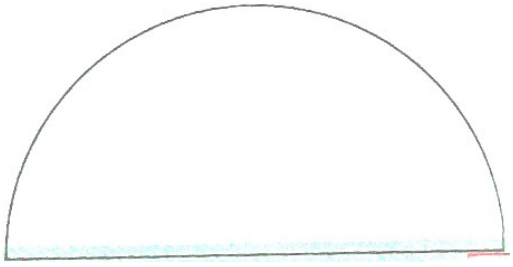
(9) Workout: 5.6 - 2.68

(10) A box contains 20 plastic ducks, 3 of the ducks are green, 10 are blue and the rest are yellow. A duck is taken from the box at random. What is the probability that it is yellow?

(11) Five numbers are shown.

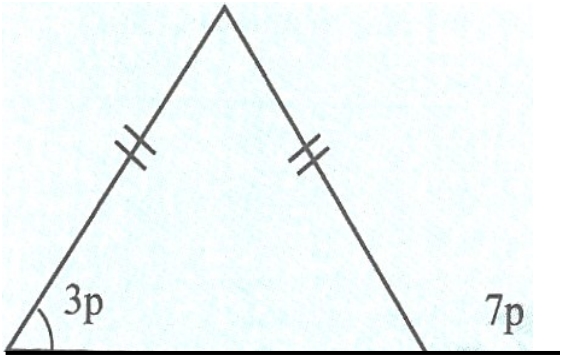
Which two of these numbers have a total of 100?

(12) Find the perimeter of the semicircle below.



14 dm

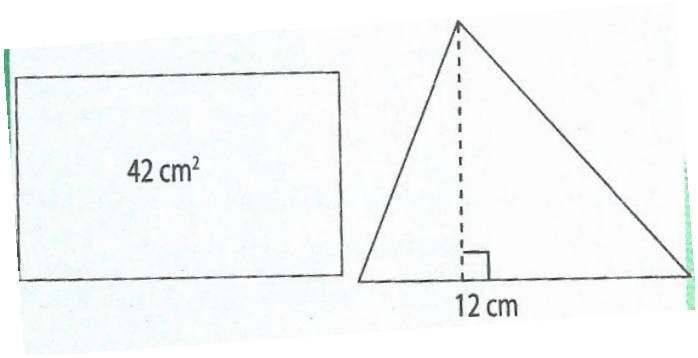
(13) Find the size of angle P In the figure below.



(14) Find the prime factors of 42.

(15) The Olean of a, (a - 1) and (a - 2) is S. Find the value of a.

(16) Given that the area of the rectangle and the triangle below is the same. What is the height of the triangle?



(17) 17. Abdul wants to make a profit of 30% on his bicycle whose value is Sh.245,000, what will be its selling price?

(18) Find the square root of $4\frac{21}{25}$.

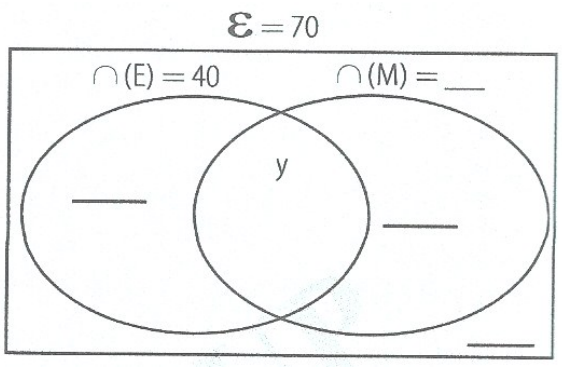
19) Round off 39.96 to one place of decimal.

(20) A rectangular piece of paper measures 12 cm by 9 cm. Find the length of its diagonal.

SECTION B

(21) In a class of 70 pupils, 40 like English (E), y like both English and mathematics; 16 like only Mathematics while 2y like other subjects.

a) Use the information to complete the information to complete the Venn diagram below.



b) How many' pupils like both subjects?

c) If a pupil is chosen at-random, what is the probability that-the chosen one likes Mathematics?

(22) A mother goes shopping with Sh. 5000 and buys the following. 2 kg of

sugar at Sh. 2400 a kg.

3 packets of tea leaves at Sh. 800 a packet,

1500 ml of cooking oil at Sh. 2000 a litre.

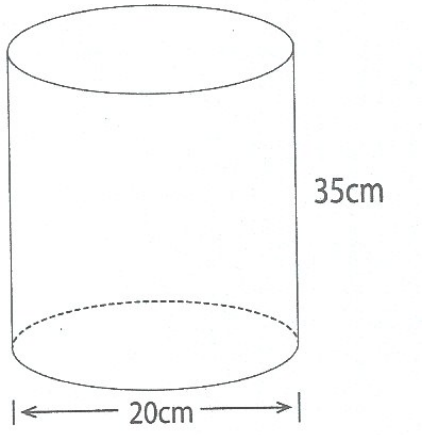
a) How much does she spend altogether?

b) If she is given a discount of 5% on all items, how much money does she go with back home?

(23) Using a pair of compasses, a ruler and a well sharpened pencil, construct a Rhombus PQRS where PR = 8 cm, QR = 6cm and angle PQR = 120^0.

b) Measure diagonal PR.

(24) Below is a cylindrical tin in which paraffin is bought. Each litre of paraffin costs Shs. 2800. Find how much it costs to buy a full tin. (Take as .7/27)

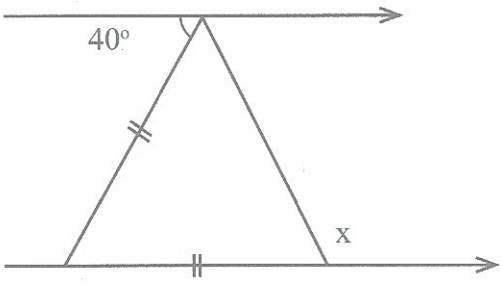


(25) a) Solve: ½ n - n = 5

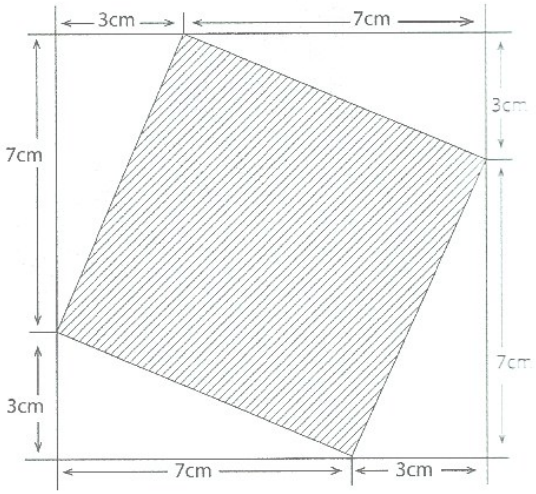
b) Find the solution set for n:-1 ≤ 2n +3< 7

(26) a) The interior angle sum of a regular polygon is 1080°. Name the polygon.

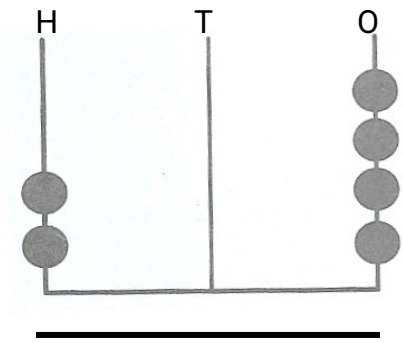
b) Find the size of angle marked X.



(27) Study the diagram below and use it to find the area of the shaded part



(28) a) Write the number shown on the abacus in words.



b) Express 46.75 in standard form.

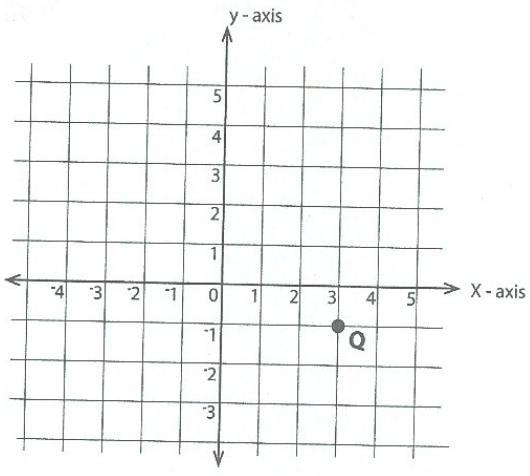
(29) In a cupboard there are 462 books, of these

4 are English books, and 7 of the remainder
7 11
are Mathematics books. The rest are Science books.

a) What fraction of the book is for Science?

b) How many more English books than Science are in the cupboard?

(30) Use the co-ordinates graph below and answer questions that follow.



a) Plot the points A (3, 2), B(3, -1) and C(-l, 1).

b) Points A, Band C are three corners of a rectangle. Point D is the fourth corner of the rectangle, what are the co-ordinates of point D.

c) Join the points, A to B, B to C, C to D and D to A and find the area of the rectangle in square units.

(31) a) A trader bought 14 dozen eggs at 7 eggs for Sh, 2000. One dozen eggs were broken in transit. He decided to sell the rest at Sh. 400 each. What was his percentage?

b) How much did the trader pay for the eggs?

c) If one dozen of eggs got broken during transportation and sold each of the remaining eggs at400/=, calculate the trader's percentage profit.

(32) A cyclist and a motorist start from the same place along the same road at 2:30 pm. The cyclist travels at 16 km/hr and the motorist does at 56 km/hr, How far ahead of the cyclist is the motorist at 4:00 pm?

END

HILLSIDE PRIMARY SCHOOL NAALYA

MOCK SET TWO. 2019

(1) Work out:
$$\begin{array}{r} 595 \\ -\ 373 \\ \hline \\ \hline \end{array}$$

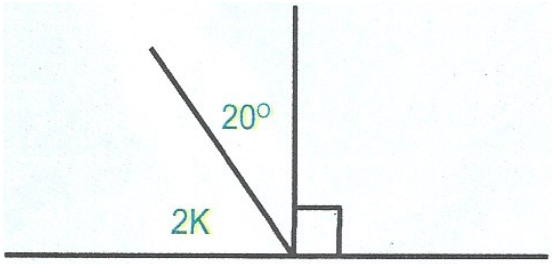
(2) Solve: $2m - 5 = 7$

(3) Find the range of the next two numbers in the sequence: 8, 10, 15, 17, 22, 24,…, ….,

(4) Express 25,000g to kg

(5) Given that set M = {all square numbers between 0 and 35)
How many proper subsets are in set M?

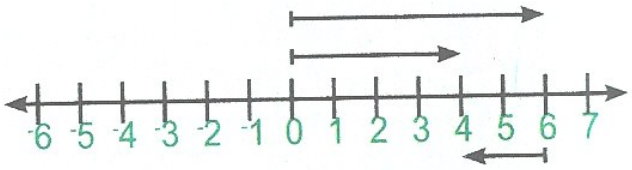
(6) Find the value of K in the diagram below



(7) Given that X = 5, y = 3 and q = 2 find the value of x –y (q-y)-q

(8) A bundle of ten thousand shillings notes are numbered from TR00159 to TR00208.
How much money is in the bundle?

(9) Write the mathematical statement for the number line below.



(10) Work out 72.72 ÷ 12

(11) Simplify $6x + 4y - 2x - 5y$

(12) Express 00 50 hours in twelve hour clock system.

(13) Using a pair of compasses, a ruler and a pencil only, construct an angle of 75^0

(14) Andrew drove his car at a speed of 60km/hr and covered a distance of 100km. How long did he take to cover that distance (give your answer in minutes)

(15) Work out $\frac{1}{4} + \frac{1}{2} \div \frac{3}{4}$

(16) Find the area of a circle whose radius is 3.5cm (use $\pi = \frac{22}{7}$)

(17) Expand 1999 using place values.

(18) What number has been prime factorized to give; {2_1, 2_2, 7_1, 7_2}

(19) Express 0.625 as a percentage.

(20) Work out using distributive property: 14.5x2.4) + 55 x 2.4)

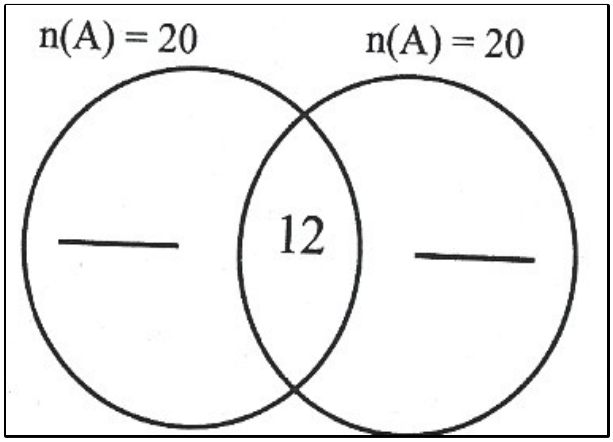
SECTION B

(21) Give that ∩(A) =20, (B) = r,

∩(A ∩ B)=12 and n(AUB)=31

Use the information above and complete the Venn diagram below.

n(∑) = 31



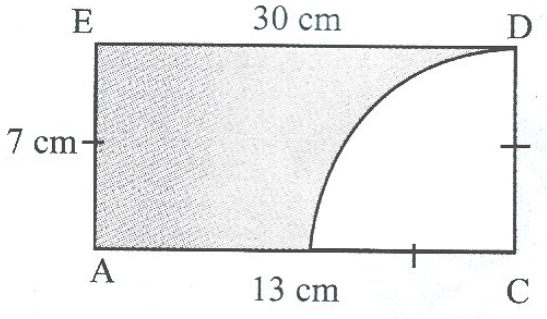
(a) Find the number of members in set B only.

(22) (a) Solve:

$\frac{(a-2)}{1} = \frac{(2a+2)}{4}$

(b) Solve: $2b-3(1-b)=4$

(23) Find the area of the shaded part in the figure below. (use $\pi = \frac{22}{7}$



(24) In a school, the ratio of boys to girl is 3:5.

(a) If there are 240 boys, how many pupils are in the school?

(b) How many more girls than boys are in the school?

(25) A parent bought the following items for his son.

(i) 3 dozens of books at Sh 500 per book.

(ii) 2 pens at Sh450 per pen

(iii) 3 pencils at sh 300per pencil

(iv) 5 rulers at sh 2000

a) Find the total amount of money the parent paid.

b) If the parent was given a change of shs 1,500, how much did the parents have at first?

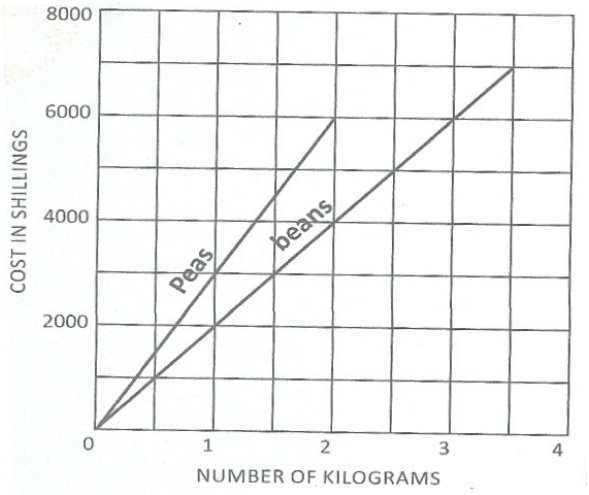
(26) In a club, the weight of members is as follow:

62 kg, (2p-6) kg, 76kg and 2p kg.

(a) If the average weight was 63 kg, find the value of p.

(b) Find their median weight.

(27) The graph below shows the cost of peas and beans at Maama Mambo's shop.



(a) How much does each kilogram of peas

cost?

(28) Abus left Masaka and reached Mpigi at 3:20 pm, if the journey took 100 minutes,

(a) At what time did the bus leave Masaka?

(b) How many kilograms of beans can I buy with shs 7000?

(b) If Mpigi is 120Km Masaka, find the average speed of the bus in Km/hr.

(c) Find the total cost of 3 kgs of peas and $1\frac{1}{2}$ kg of bean

(29) (a) Using a pair of compasses, a ruler and a pencil only, construct a triangle **PQR** in which **PR**=8cm, angle **P**=30^0 and **R**=45^0, construct a perpendicular from **Q** to meet

PR at **M**

(c) Find the sum of the values of and 5 In 6745.

(31) A rectangle polygon has aside measuring 7.5cm and its exterior angle is 45^0.

(a) Work out the perimeter of the polygon above.

(b) Find the area of the triangle **PQR.**

(b) Find the interior angle sum of the polygon above.

(30) What is the place value of 4 in 34o57?

(32) The sum of 4 consecutive odd numbers is 56.

(a) Find the four odd numbers.

(b) Express 36.87 in standard form.

(b) Find the product of the smallest and the largest numbers

END