

NAME: _____ ADM.NO. _____ CLASS _____

Instructions

1. Write your name, admission number and class in the spaces provided above.
2. All working must be shown in the spaces provided below each question.
3. Marks may be given for the correct working even if the answer is wrong.

70 MARKS.

1. Work out:

a) $P + 2q - (p - q)$ (2 mks)

b) $8m - 3m + 4m - 2m - 7m$ (2mks)

2a) Find the sum of $317 - 342 + 1048 + 72$ (3mks)

b) Work out $\frac{2}{3}$ of $\frac{11}{5} + 0.4$ of 6 (Give your answer in decimal)

3a. $\frac{1}{3}$ of Josephs' books are the same in number as $\frac{1}{4}$ of Johns. If John has 60 books, how many has Joseph? (3mks)

3b) Find the value of: $\sqrt{4} + \sqrt{9} \div \sqrt{5}$ (3mks)

4a) The marked price of a shirt was Kshs 500.00. The Shopkeeper offered a discount and sold it at Sh. 480. Calculate the percentage discount (3mks)

b). Miss Kanyonga sold goods worth shs 12,000 at a commission of 5%. How much Commission did she get? (3mks)

5a) A rectangle which is three times as long as it is wide has the same perimeter as a square of area 64cm^2 . What is the length of the rectangle? (3mks)

b) A man hired a car for two weeks for sh. 10,500. How much would it have cost him to hire it for nine days. (2mks)

6. Use substitution method to solve the following simultaneous equations.

a) $3x + 4y = 18$
 $2x - y = 1$ (3mks)

b) $\frac{1}{2} + y = 5$
 $\frac{1}{3} = 5 - x$ (3mks)

7. a(i) The ratio of the cost of commodity x to that of a commodity Y IS 2:3 and ratio of the cost of Y to the cost of a commodity Z is 6:1. If the total cost of the three commodities is sh. 1100; Find the cost of X. (4mks)

ii) Express the cost of Z as a percentage of the cost of Y (2mks)

b. Two people M and N have goats. M has more goats than N and if N gives M one of his goats, M will have twice as many goats as N. M gives N one of his goats, they will have equal number of goats. How many goats does each have? (4mks)

8. a) A Kenyan bought a car in Zimbabwe for 12000 dollars. In Kenya, he sold it at a profit of 15%. If 1 z dollar = Ksh 9.8489. Calculate his profit in Kenya shillings. (3mks)

b) Mrs Kanana has exactly sh. 700 in her handbag. This money is composed of sh. 50 notes and sh.100 notes. If she had a total of 11 notes, how many notes of each kind does she have? (4mks)

9. If $X = 1/2$, $y = 11/4$, $Z = 2/3$. Find the value of;

a) $\frac{xz}{x+z}$

(3mks)

b) $X + Y + Z$

(3mks)

10. Peter's present age is $1/3$ of his father's age in 10 years time he will be half as old as his father. How old are they now? (4mks)

11. A machine can harvest a farm in 15 days working 8 hours a day. How long will two machines take to harvest it if used for 10 hours a day. (4mks)

12. The length of an arc of a circle is $1/10$ of the circle. If the area of the circle is 13.86 cm^2 , Find;

A) the angle subtended by the arc at centre of the circle (3mks)

b)The area of the sector enclosed by this arc.(3mks)