

GATITU SECONDARY SCHOOL P O BOX 327 01030 GATUNDU

MATHEMATICS FORM ONE TERM TWO

TIME 2HRS

NAME-----ADM-----

INSTRUCTOINS;

ANSWER all the questions on the spaces provided below each question showing ALL your workings.

1 Evaluate the following; $3\frac{7}{8} + \frac{3\frac{7}{8} \div 7\frac{3}{4}}$

$$\sqrt{5\frac{1}{10} + 2\frac{9}{10}}$$

(4mks)

2 Use tables to find squares of each of this numbers

(a) 0.32

(b) 0.6128

(c) 0.0001497

(2mks each)

3 Find using tables the square roots of each of the following numbers;

(a) 0.0529

(b) 0.009823

(c) 689432

(2mks each)

4 Evaluate using tables

(a) $\frac{(0.706 \times 20.5)^2}{32.2}$ (4mks)

(b) $\frac{(23.5)^2 \times 0.701^2}{3.4}$ (4mks)

5 Express as a single fraction in its lowest form

(a) $\frac{a^2b}{4ab} + \frac{b^2a}{4ab} + \frac{3}{4}$ (3mks)

(b) $\frac{1}{A^2bc} + \frac{(a+b)}{ab^2c} + \frac{1}{abc^2}$ (3mks)

6 Which of the following ratios is greater?

(a) 2:3 or 1:4

(b) 8:9 or 10:11

(c) 5:2 Or 20:17 (2mks each)

7 Find the ratio a:c if;

a:b = 1:2, b:d = 4:5, d:c = 3:1

(3mks)

a:b = 7:1, b:d = 1:2, d:e = 2:3

(3mks)

8 Simplify by use of common factors

(a) $\frac{3bx - 3by + 4ax - 4ay}{4a + 3b}$

(4mks)

(b) $\frac{4xy - 3x + 8y^2 - 6y}{8y - 6}$

(3mks)

9 A man invested sh 36000 in two companies P and Q. P pays a dividend of 11 $\frac{1}{4}$ % while Q pays a dividend of 10 $\frac{1}{2}$ %. If from his total investment he obtained a return of 10 $\frac{3}{4}$ %, how much money did he invest in each company? (4mks)

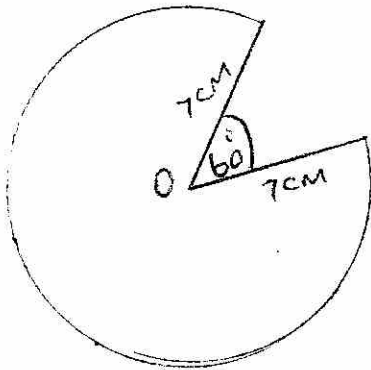
10 The length of an arc of a circle is 9.42 cm. If the diameter of the circle is 10 cm, find the angle subtended by the arc at the center of the circle (3.142) (3mks)

11 A flower bed measuring 3m by 1.5 m is surrounded by a path 1 m wide. Find the area of the path. (4mks)

12 Three tractors each working eight hours a day can plough a field in five days. How many days would two such tractors working 10 hours a day take to plough the same field? (3mks)_

13 Find the perimeter of the following figure.

(3mks)



14 In a quality control analysis 3.5 % of all parts of a machine were declared sub-standard. If there were 72 sub-standard parts how many parts were analyzed?

(4mks)