

NAME.....ADM NO.....CLASS.....

**ANSWER ALL QUESTIONS IN SPACES PROVIDED**

1. The cost of six shirts and two pairs of trousers is Shs. 1320 while that of three and four trousers is Shs. 1290. How much will George pay for two shirts and two pairs of trousers? ( 5 Marks )

2. a) Evaluate

$$\frac{7\frac{1}{8} - 2\frac{2}{3}}{\frac{1}{4} \times 9\frac{1}{2}}$$

( 3 Marks )

b)  $\frac{9}{4} \left( \frac{10}{3} + \frac{11}{4} \right)$

( 2 Marks )

3. A square garden is enclosed by a path of width 1 metre. If the area of the path is  $64 \text{ m}^2$ , determine the perimeter of the outer boundary of the path. ( 5 Marks )

4. Solve the equation.

$$\frac{2x + 1}{4} - 2 = 5 - \frac{x + 2}{4}$$

( 4 Marks )

5. The volume of a cylinder is  $196 \text{ cm}^3$ . If the cylinder has a base radius of 1.4 cm, find its height. ( Take  $\pi = \frac{22}{7}$  ) ( 5 Marks )

6. Solve the simultaneous equation.

$$3x - 2y = 23$$

$$2x - y = 6$$

( 3 Marks )

7. A bus left town A for town B at 8.30 a.m. The journey took 6 hours and 5 minutes. At what time did the bus reach its destination? ( 2 Marks )

8. A hollow cylindrical alloy of length 4 m weights 325 g. If its internal and external radii are 3 cm and 4 cm respectively, calculate the density of the metal. ( 3 Marks )

9. Three people A, B and C are to share Shs 2,200 among themselves in the ratio  $a : b : c$  respectively. If  $a = \frac{1}{2} b$  and  $C = \frac{1}{3} b$ , find how much each person will get.

10. John spent  $\frac{1}{4}$  of his September salary on rent,  $\frac{1}{3}$  of the remainder on food, and  $\frac{1}{10}$  of what was on other bills. If he still had Shs 4,500, what was his September salary. ( 3 Marks )

11. Express  $\frac{x - 3}{x + 3} - \frac{x + 3}{x - 3}$  as a single fraction. ( 3 Marks )

13. Wanjiru, Atieno and Jeptoo shared the profit of their business in the ratio 3 : 7 : 9 respectively. If Atieno received Shs 60,000, how much profit did the business yield.