

MATHEMATICS FORM 2 TERM 1 AMBUSH TEST 1-2017
ADM

NAMES $\qquad$

CLASS $\qquad$

DATE $\qquad$

SCHOOL $\qquad$

SCORE 26

TEACHER'S COMMENT
$\qquad$
$\qquad$

## INSTRUCTIONS

## Answer all the questions given below

1 It takes 10 workers 12 days working 6 hours a day to harvest maize in a farm. How many days would 50 workers working 12 hours a day take to harvest the maize?

2 Simplify;
a) $\frac{7 y^{2}+y^{3}}{7 y \div y}$
b) $\frac{2 r-3}{4}+\frac{1-r}{3}$

3 Find of the shaded region in the diagram below


4 Find the ratio of a:c if; $a: x=3: 1, x: 2=4: 1,2: c=2: 1$

5 A biscuits producing company packs biscuits in packets of 18,48 or 60 biscuits each. What is the smallest number of biscuits that can be packed in any of these quantities without any biscuit left over?

6 A water container is in the shape of a cuboid. Its base is 20 cm by 20 cm and the depth of the water in the container is 15 cm . Gesare adds 1000 $\mathrm{cm}^{3}$ of water to the container. Calculate the new depth, d , of the water, in centimeters.


7 A sales woman is paid a commission of 2\% on goods worth over Kshs. 106,000 . She is also paid a monthly salary of Kshs. 12000. In a certain month, she sold 360 handbags at Kshs 500 each.
a) Calculate the saleswoman's earning that month
b) The following month, the saleswoman's monthly salary increased by $10 \%$. Her total earnings that month were Kshs. 17, 600. Calculate; i. The total amount of money received from the sales of handbags that month
ii. The number of handbags sold that month

8 Without using a calculator, evaluate;

$$
\frac{-2(5+3)-9 \div 3+5}{-3 \times-5+-2 \times 4}
$$

