

MATHEMATICS FORM 2 TERM 1 AMBUSH TEST 1 - 2017
ADM
NAMES
CLASS
DATE
SCHOOL
SCORE
TEACHER'S COMMENT
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;

[2 MKS]

a) 
$$\frac{7y^2 + y^3}{7y \div y}$$

b) 
$$\frac{2r-3}{4} + \frac{1-r}{3}$$

[2 MKS]

3 Find of the shaded region in the diagram below

16cm

[3 MKS]



4cm

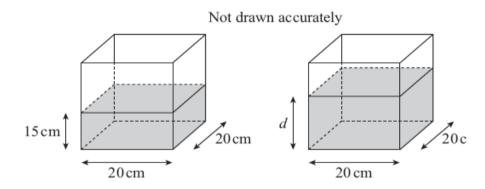
4 Find the ratio of a:c if; a: x = 3: 1, x: 2 = 4: 1, 2: c = 2: 1

[3 MKS]

5 A biscuits producing company packs biscuits in packets of 18, 48 or 60 [2 MKS] 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 20cm by 20cm and the depth of the water in the container is 15cm. Gesare adds 1000 cm<sup>3</sup> of water to the container. Calculate the new depth, d, of the water, in centimeters.

[3 MKS]



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.

[2 MKS]

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

[2 MKS]

8 Without using a calculator, evaluate;

[2 MKS]

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