



Grade

7

## THIRD TERM TEST - 2018

### Mathematics

School : .....

Name of the Student/ Index No : .....

Time: 2 hrs.

#### Part I

Answer all the questions.

1) Simplify  $2(10-5)+100$ .

2) Which century 2018 A. D. belongs to?

3) What is the difference between (+2) and (-4) on the number line?

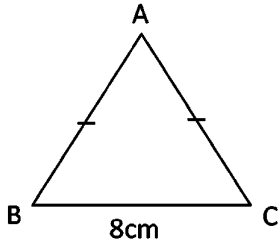
4) Write the prime factors of 12.

5) Write  $\frac{3}{5}$  as a decimal.

6) Simplify  $2x + 3y + 3x - 7$

7) A  $\frac{1}{2}$  of the tank is filled by water. If a  $\frac{1}{3}$  of the water in the tank is used, write the remaining water amount in the tank now as a fraction.

8)



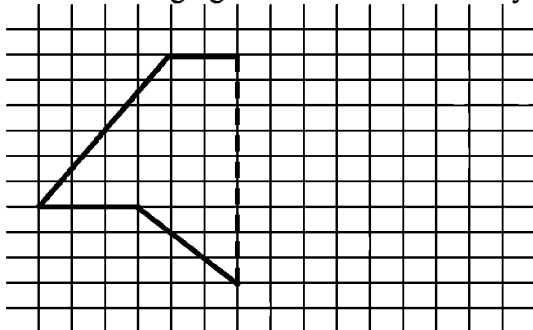
If the perimeter is 20cm of the triangle ABC, find the length of the side AB.

9) State whether the following are a random event or an event that definitely occurs.

- I. Getting a chance to win a lottery ticket bought by father. (..... )
- II. Withering of a bloomed flower. (.....)

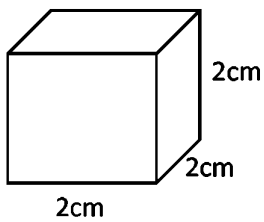
10) A 7.5 kg of biscuits has been given to a certain school as a snack. Find the amount of biscuits needs to be given to 10 schools, in kilograms.

Complete the following figure to obtain a bilateral symmetric figure.



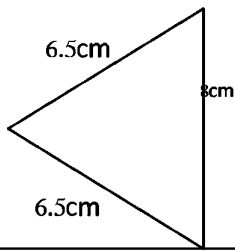
12) There are 36 same size buttons and they should be arranged as rows and columns with equal number of buttons for a row and a column. How many buttons should be laid in one row?

13)



Find the volume of the cube of the given diagram.

14) Write the name of the following triangle considering the length of its sides.

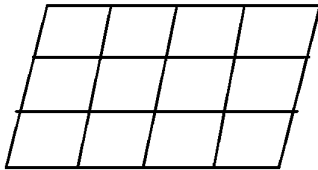


15) Write the following set using elements.

$A = \{\text{even numbers set using elements}\}$

16) Three bells ring at intervals of 10 minutes, 20 minutes and 30 minutes respectively. If these bells ring together at 9.00 am, at what time will they ring together again?

17)

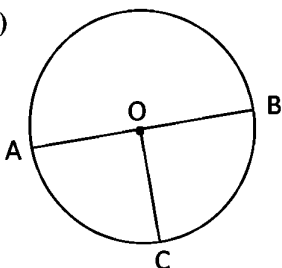


Write the name of the type of tessellation.

18) A 40% includes apples in a fruit parcel of mass of 20kg that was brought by a person. Find the mass of apples he brought.

19) Find the number of faces of a solid with 8 vertices and 12 edges.

20)



AOB is a straight line of a circle of centre is O. Name a radius and a diameter of it.

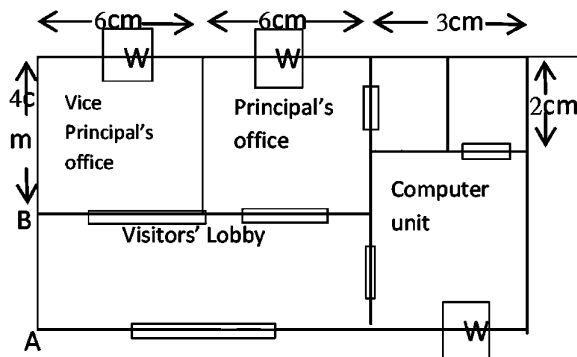
## Part II

### Answer 5 questions including question 1.

1)a) Think about an activity that you have to participate in to measure the length of some buildings in the school. You have to find the area of the floor of the office room and the perimeter of the hall of the office complex.

- I. Write the measuring instrument that can be used to measure the length of the hall. (01 mark)
- II. What is the suitable measuring unit to measure the length of the hall? (01 mark)
- III. If the length of the hall is 24m and 25cm and the breadth is 6m and 50cm, draw the sketch of it and mark those measurements. (02 marks)
- IV. What is the extra length more than the breadth of the hall? (02 marks)
- V. Find the perimeter of the hall. (03 marks)

b) The following figure shows the sketch of the office room. It is drawn to the scale 1:1000.



- i. Find the actual length represented by 1m. (1 mark)
- ii. What is the length of the Principal's room? (01 mark)
- iii. What is the area of the Principal's office? (02 marks)
- iv. If the width (AB) of the Visitors' Lobby is 2m, what is the length in the sketch? (01 mark)
- v. Find the actual length and width of the computer unit. (02 marks)

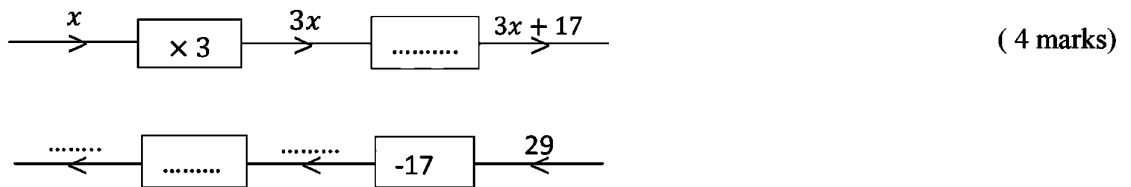
02) The following table provides information on the variety of ice cream that students like most in 3 classes of a certain school

Class	Number of students		
	Vanilla	chocolate	strawberry
7A	10	30	10
7B	15	30	10
7C	20	10	15

- i) Represent the information in a multiple column graph. ( 6 marks)
- ii) Write the ratio between the number of students who like chocolate ice cream and the number of students who like vanilla ice cream in the simplest form. ( 2 marks)
- iii) How many students like vanilla in the 3 classes? ( 1 mark)
- iv) Write the above amount (in iii) as a percentage from the total number of students in 3 classes. ( 2 marks)

3)

- i. Copy the following flow charts to solve the equation  $3x + 17 = 29$  complete the blanks.



- ii. When Amal gave Rs. 1000 to a vendor to buy a bag of oranges, the vendor gave back Rs.200 as the balance.
  - a) If the price of an orange is  $x$  , build up an equation using  $x$  (02 marks)
  - b) Find the price of an orange. (03 marks)
- iii. Amali bought 5 books priced at Rs. 5 each and two pencils priced at  $y$  rupees each. Build up an algebraic expression for the total price that Amali should pay. ( 2 marks)

4) When Saroja makes a fruit drink, she mixes fruit juice and water in the ratio 1:2

- i. If the amount of the water that is mixed is 4 liters, find the amount of fruit juice needed. (02marks)
- ii. Saroja needs 9 liters of fruit drink to serve at the party. Find the amount of water and fruit juice needed separately. (03 marks)
- iii. The cost for one liter of fruit juice is Rs. 750 and the cost of one liter of water is Rs. 2. Find the total cost to make the drink for the party. (03marks)
- iv. An equal amount of fruit drink of 9l is poured in to glasses which contain 300ml in each without any wastage. Find the number of glasses needed to serve at the party. (03 marks)

5)

- i. Construct a line segment  $AB=6cm$  (01mark)
- ii. Construct a triangle ABC that a side is AB. (02marks)
- iii. Mark the mid points of AC and BC as D and E. (02marks)
- iv. Join AE and BD and name the intersecting point of them as "O". (02marks)
- v. Measure the angle  $\widehat{AEB}$  using a protractor and write the value. Write the type of the angle. (02marks)
- vi. Construct a circle of radius OA and the centre is O. (02marks)

6)

- i. Draw a Cartesian plane which is marked 10 units along the  $x$  axis and the  $y$  axis and mark the following on it.  
A (0,4) B(2,0) C(6,0) D (8,4) E(6,8) F(2,8) (06marks)
- ii. Join these points in order. Write the name of the figure. (02marks)
- iii. Draw two axes on that figure. (02marks)
- iv. Write the point on which two axes are intersected. (01mark)