# FIRST TERM EVALUATION 2014 - 2015

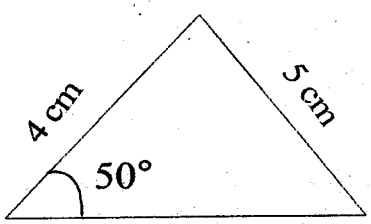
## Mathematics

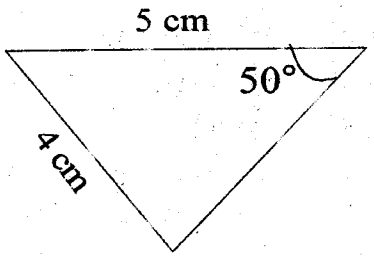
Std. 8

Time : 2 hrs.
Score : 50

Instructions :
- You are not supposed to write anything during the cool - off time.
- Read the instructions carefully and attempt the questions.

1.




Are the triangles congruent? Justify your answer 3

2. State true or false

a. If two sides of a triangle are unequal, the angle opposite to the larger side is larger.

b. If three angles of one triangle are equal to three angles of the other triangle, then the two triangles are congruent.

c. Sides opposite to equal angles of a triangle are equal. 3

3. The cost of 12 books is Rs. 54. What is the cost of 15 books. 3

4. Simplify the followings

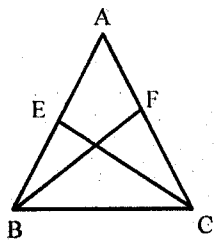
a. $(3x - 8.5) + (7x - 8.5)$

b. $(-1)^4 + (-1)^3 + (-1)^2 + (-1)^1 + (-1)^0$

c. $\frac{-25}{5} \times \frac{10}{-5} \times \frac{-5}{2} \times \frac{2}{5}$ 4

5. E and F are respectively the mid points of equal sides AB and AC of triangle ABC.

Show that BF = CE 4




*(P.T.O.)*

6. a. Draw a line of length 5.5cm. Then construct a line of length 2.75cm.

   b. Draw an angle. Then draw its angle bisector. **4**

7. If 7:13 = K : 5/2 find the value of K. **4**

8. If 15 workers can complete a job in 48 hours, how many workers will be required to do the same work in 30 hours? **4**

9. Simiplify the followings

   a. (4x - 3y) - (3y - 4x)

   b. (7x + y)3 - 4 (x-y)

   c. (x-y) + (y-x) - (x+y) **4**

10. If a box of sweets is divided among 24 students, they will get 5 sweets each. How many would each get if the number of students is reduced by 4. **4**

11. The perimeter of a quadrilateral is 98cm and its sides are in the ratio 1:2:5:6. What are the lengths of the sides? **5**

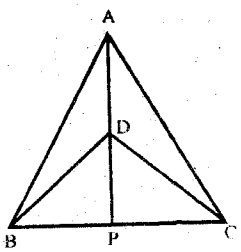
12. If x = -2, y = 5 and z = -7, then prove the followings

   a. (x+y) z = xz + yz

   b. (x-y) -z = x - (y + z)

   c. x - (y - z) = (x-y) + z **5**

13. In the figure AB = AC and BD = CD. Then show that




   a. $\Delta ABD \cong \Delta ACD$

   b. $\Delta ABP \cong \Delta ACP$

   c. AP bisects $\angle A$ as well as $\angle D$ **5**