

# Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: IX

Date: .....

Name: .....

ID No.....

1. Write the correct answer in each of the following.

(i.) Prove that sum of the angles of a triangle is  $180^\circ$ .

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(ii.) In  $\triangle ABC$  (Fig. 4.23), the sides  $AB$  and  $AC$  of  $\triangle ABC$  are produced to points  $E$  and  $D$  respectively. If bisectors  $BO$  and  $CO$  of  $\angle CBE$  and  $\angle BCD$  respectively meet at point  $O$ , then prove that  $\angle BOC = 90^\circ - \frac{1}{2}\angle A$ .

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