

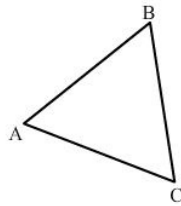


Triangles Ex 12.1 Q1

Answer :

Let us consider three non-collinear points A, B and C and join them.

After joining these points, we get a 'Triangle', as it consists of three sides. The name of the triangle we get is $\triangle ABC$.

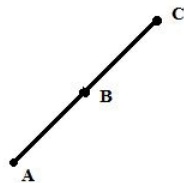


- (i) The side opposite $\angle B$ is AC.
- (ii) The angle opposite side AB is $\angle C$.
- (iii) The vertex opposite side BC is A.
- (iv) The side opposite vertex B is AC.

Triangles Ex 12.1 Q2

Answer :

Let us consider three collinear points A, B and C and join AB, BC and CA.

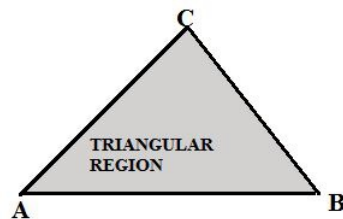


The figure we get is not a triangle because it is a straight line consisting of only one side. It is also not a closed figure, whereas a triangle is defined as a closed figure consisting of three sides.

Triangles Ex 12.1 Q3

Answer :

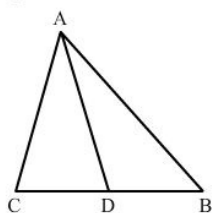
A triangle is defined as a closed polygon consisting of three sides, whereas a triangular region is the region that lies inside the triangle. In the adjoining figure, the shaded region shows the triangular region.



Triangles Ex 12.1 Q4

Answer :

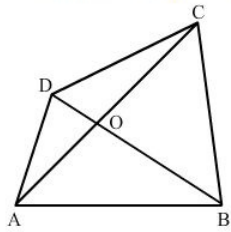
The figure consists of triangles $\triangle ADC$, $\triangle ADB$ and $\triangle ABC$. Therefore, three triangles are present in the figure.



Triangles Ex 12.1 Q5

Answer :

The following figure consists of triangles, namely $\triangle ODC$, $\triangle ODA$, $\triangle OBC$, $\triangle OAB$, $\triangle ADB$, $\triangle ACB$, $\triangle DAC$ and $\triangle DBC$. Hence, there are a total of eight triangles.

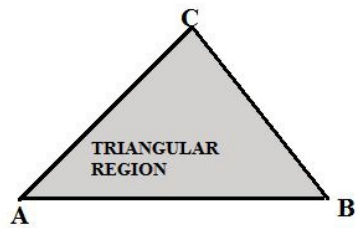


Triangles Ex 12.1 Q6

Answer :

A triangle is defined as a closed polygon consisting of three sides, whereas a triangular region is the region that lies inside the three sides of the triangle.

In the adjoining figure, the shaded region shows the triangular region.



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