

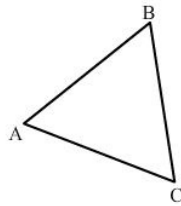


### Triangles Ex 12.1 Q1

**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  $\triangle ABC$ .

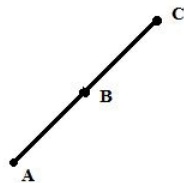


- (i) The side opposite  $\angle B$  is AC.
- (ii) The angle opposite side AB is  $\angle C$ .
- (iii) The vertex opposite side BC is A.
- (iv) The side opposite vertex B is AC.

### Triangles Ex 12.1 Q2

**Answer :**

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

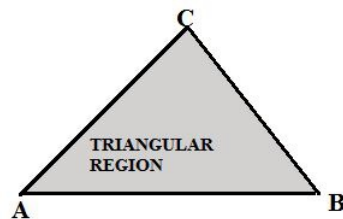


The figure we get is not a triangle because it is a straight line consisting of only one side. It is also not a closed figure, whereas a triangle is defined as a closed figure consisting of three sides.

### Triangles Ex 12.1 Q3

**Answer :**

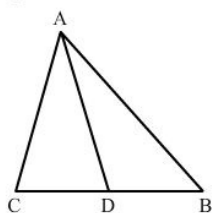
A triangle is defined as a closed polygon consisting of three sides, whereas a triangular region is the region that lies inside the triangle. In the adjoining figure, the shaded region shows the triangular region.



### Triangles Ex 12.1 Q4

**Answer :**

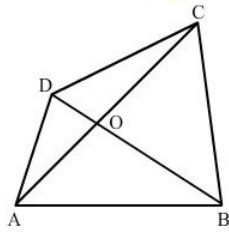
The figure consists of triangles  $\triangle ADC$ ,  $\triangle ADB$  and  $\triangle ABC$ . Therefore, three triangles are present in the figure.



### 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.

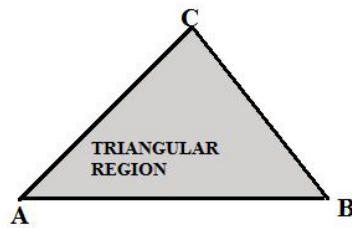


Triangles Ex 12.1 Q6

**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.



\*\*\*\*\* END \*\*\*\*\*