

Activity 10

Objective : To find a hidden picture by plotting and joining with given coordinates in a plane.

Pre-requisite knowledge : Knowledge of plotting points in a cartesian plane.

Materials required : Graph paper and the given set of points.

Procedure

1. On a graph paper, draw two rectangular axes XOX' and YOY' as shown in figure 10.1.
2. Plot the points $A(0, 13)$, $B(2, 11)$, $C(3, 9)$, $D(1, 0)$, $E(4, -5)$, $F(0, -4)$, $G(-4, -5)$, $H(-1, 0)$, $I(-3, 9)$, $J(-2, 11)$, as shown in figure 10.2.
3. Join the points $A \rightarrow B \rightarrow C \rightarrow D \rightarrow E \rightarrow F \rightarrow G \rightarrow H \rightarrow I \rightarrow J \rightarrow A$, to get a polygon, as shown in the figure 10.3.

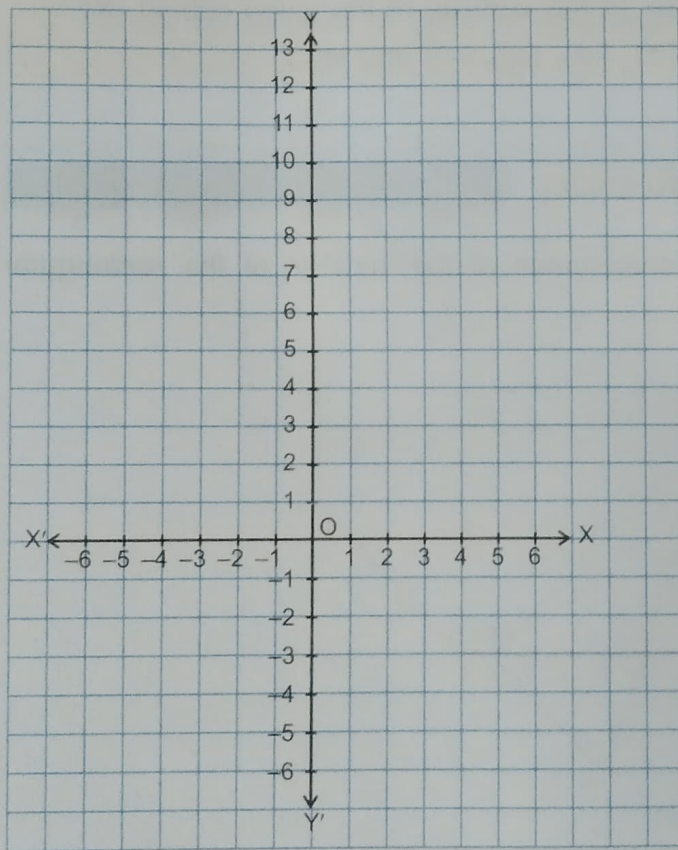


Figure 10.1

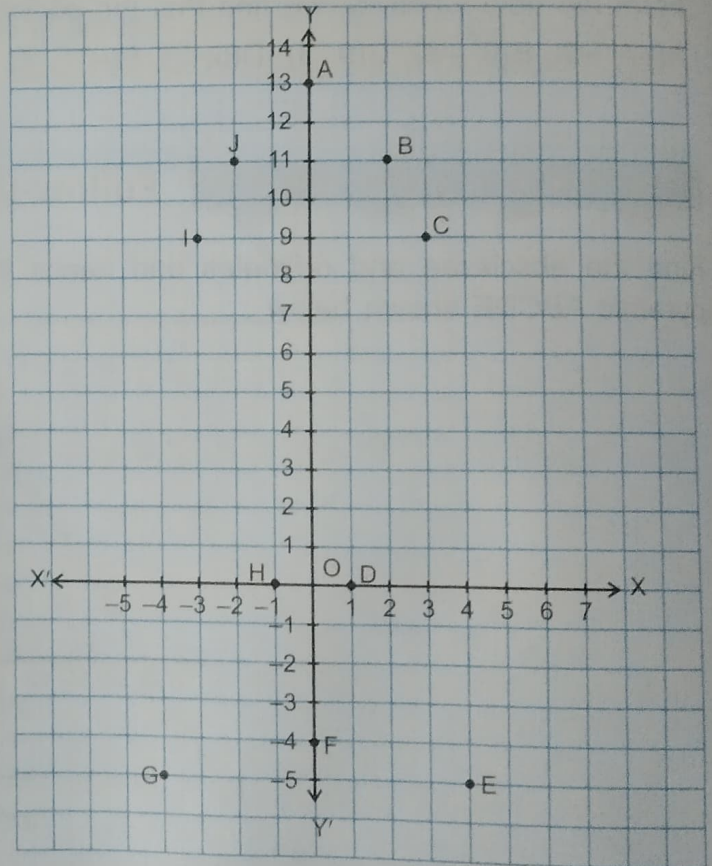


Figure 10.2

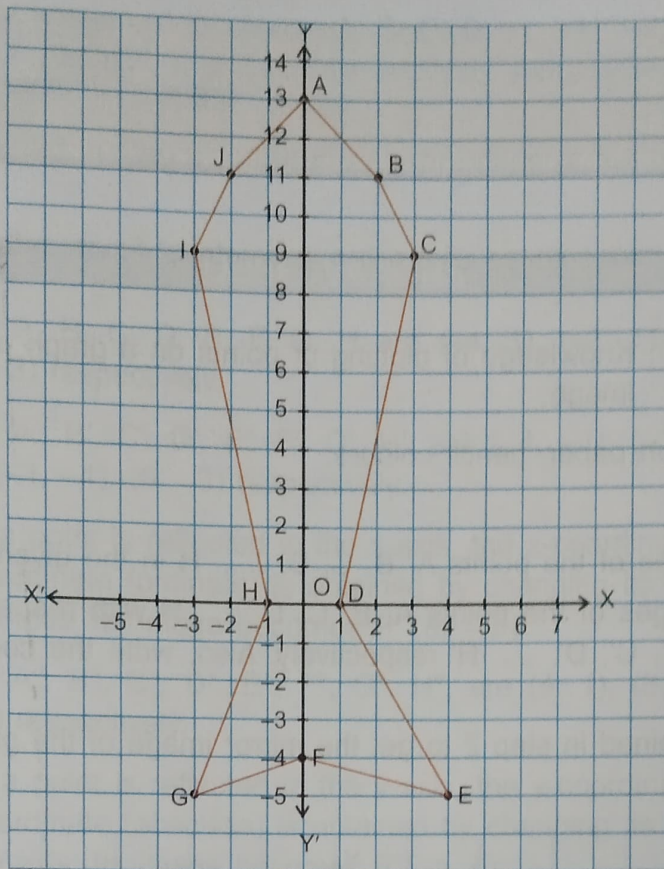


Figure 10.3

OBSERVATIONS

On joining the given points in sequence, a picture of an aeroplane is obtained.

Follow-up Activity

Plot the points $A(0, 11)$, $B(6, 4)$, $C(3, 6)$, $D(0, 3)$, $E(3, -10)$, $F(0, -7)$, $G(-3, -10)$, $H(-3, 6)$, $I(-6, 4)$ on a graph paper. Join the points $A \rightarrow B \rightarrow C \rightarrow D \rightarrow E \rightarrow F \rightarrow G \rightarrow H \rightarrow I \rightarrow A$ and get the hidden picture.