

# Coordinate Geometry

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## 10<sup>th</sup> Maths - Chapter 7

This is Problem-1(ii) from Exercise 7.3

1. Find the area of the triangle whose vertices are :  
(ii)  $(-5, -1)$ ,  $(3, -5)$ ,  $(5, 2)$

**Solution:**

Given Data:

$$x_1 = -5,$$

$$x_2 = 3,$$

$$x_3 = 5,$$

$$y_1 = -1,$$

$$y_2 = -5$$

$$y_3 = 2$$

(1)

$$Area\ of\ the\ triangle = \frac{1}{2}[-5(-5 - 2) + 3(2 + 1) + 5(-1 + 5)] \quad (2)$$

$$= \frac{1}{2}(35 + 9 + 20) = 32 \quad (3)$$

Therefore, the area of the triangle is 32 square units.