# CHAPTER-7
## Area of a Traingle

## Exercise 7.3

1. Find the area of the triangle whose vertices are :
   (i) (2, 3), (–1, 0), (2, – 4)  (ii) (–5, –1), (3, –5), (5, 2)

2. In each of the following, find the value of '$k$', for which the points are collinear.
   (i) (7, –2), (5, 1), (3, $k$)  (ii) (8, 1), ($k$, – 4), (2, –5)

3. Find the area of the triangle formed by joining the mid-points of the sides of the triangle whose vertices are (0, –1), (2, 1) and (0, 3). Find the ratio of this area to the area of the given triangle.

4. Find the area of the quadrilateral whose vertices, taken in order, are (– 4, – 2), (– 3, – 5),(3, – 2) and (2, 3).

5. You have studied in Class IX, (Chapter 9, Example 3), that a median of a triangle divides it into two triangles of equal areas. Verify this result for $\triangle$**ABC** whose vertices are **A**(4, – 6), **B**(3, –2) and **C**(5, 2).