EXERCISE 4.2

1. Find area of the triangle with vertices at the point given in each of the following :

(i) (1, 0), (6, 0), (4, 3) (ii) (2, 7), (1, 1), (10, 8)

(iii) (–2, –3), (3, 2), (–1, –8)

2. Show that points

A (a, $b + c$), B (b, $c + a$), C (c, $a + b$) are collinear.

3. Find values of k if area of triangle is 4 sq. units and vertices are

(i) (k, 0), (4, 0), (0, 2) (ii) (–2, 0), (0, 4), (0, k)

4. (i) Find equation of line joining (1, 2) and (3, 6) using determinants.

(ii) Find equation of line joining (3, 1) and (9, 3) using determinants.

5. If area of triangle is 35 sq units with vertices (2, – 6), (5, 4) and (k, 4). Then k is

(A) 12 (B) –2 (C) –12, –2 (D) 12, –2