1. Find the area of a triangle whose vertices are (1, –1), (– 4, 6) and (–3, –5).

2. Find the area of a triangle formed by the points A(5, 2), B(4, 7) and C (7, – 4).

3. Find the value of k if the points A(2, 3), B(4, k) and C(6, –3) are collinear.

4. If A(–5, 7), B(– 4, –5), C(–1, –6) and D(4, 5) are the vertices of a quadrilateral, find the area of the quadrilateral ABCD.

5.Prove that the following points are collinear.

1. (-2, 3), (-6, 4), (-10, 5)
2. (a, b+c), (b, c+a), (c, a+b)

6. Find the area of triangle formed by the points A (-3,0), B(4,-1) and C(5,2) Hence, find the length of the altitude from A.

7. Find the area of the quadrilateral A B C D whose vertices are A(1,1), B(3,4), C(5,-2) and D(4,-7)

8. Find the area of pentagon ABCDE where A(4,3), B(-5,6), C(0,-7), D(3,-6) and E(7,-2)