

# Latex Assignment20

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## Ex 12.4.3

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 square 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 square units with vertices  $(2, 6), (5, -4)$  and  $(k, 4)$ . Then  $k$  is:
  - (a) 12
  - (b)  $-2$
  - (c)  $-12, -2$
  - (d)  $12, -2$