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Class $-12^{\text {th }}$
Worksheet-22

Chapter-5

Subject Maths
Inverse of a Matrix and Linear Equations

1. Find the area of triangle using the determinants whose vertices are:
(i) $(2,5),(-2,-3)$ and $(6,0)$
(ii) $(3,8),(2,7)$ and $(5,-1)$
2. Using determinants find the area of the triangle with vertices $(1,4),(2,3)$ and $(-5,-3)$, are the given points collinear?
3. Find the value of $k$ if the area of triangle is 35 Sq. units and the vertices are $(k, 4)$ $(2,-6)$ and $(5,4)$.
4. Using determinants find the value of $k$ if the points $(k, 2-2 k),(-k+1,2 k)$ and (-4-k, 6-2k) are collinear.
5. If points $(3,-2),(x, 2)$ and $(8,8)$ are collinear then find the value of $x$ using determinant.
6. Using determinants, find the equation of line passing through the points $(3,1)$ and $(9,3)$ and also find the area of the triangle if the third point is $(-2,-4)$.
