

Year 11 Coordinate Geometry Worksheet



1. Find the line of equation passing the point $(-3,5)$ with slope 4
2. Find the slope of a straight line passing through the points $(4,3)$ and $(7,2)$.
3. Find the slope of equation of perpendicular to the line $2y-x=2$.
4. If the coordinates of the mid-point of the line segment joining the points $(2,1)$ and $(1,-3)$ is (x,y) then find the relation between x and y .
5. Prove that two Parallel lines have the same slope $m_1=m_2$
6. Prove that two lines with gradients m and m' respectively are perpendicular if and only if $mm' = -1$.
7. Prove that the triangle whose vertices are $(1, 1)$, $(-1, 3)$ and $(3, 5)$ is isosceles.
8. Find the coordinates of the point A on the line $x = -3$ such that the line joining A to $B(3, 5)$ is perpendicular to the line $2x + 5y = 12$.
9. Show that the locus whose equation is $x^2 - y^2 = 0$ consists of the points lying on either of the straight lines $y = x$, $y = -x$.
10. In the rectangular coordinate system below, find the area of ΔAOB .

