**Co-ordinate Geometry**

Slope = m = 

Distance between two points A(x1, y1) and B (x2, y2):



Distance of any point P (x1, y1) from the origin:



Midpoint of the line segment from A (x1, y1) to B (x2, y2):



Parallel Lines: m1 = m2 Perpendicular Lines: m2 = 

Slope-point equation of line: y – y1 = m(x-x1)

Slope y-intercept equation of line: y = mx + b

Line parallel to x-axis: y = b (slope is zero)

Line parallel to y-axis: x = a (slope is undefined)

General equation of a line: Ax + By + C = 0

To find the x-intercepts of a graph, let y = 0 in the equation of the graph and solve for x.

To find the y-intercepts of a graph, let x = 0 in the equation of the graph and solve for y.