Chapter 3 - Coordinate Geometry

The chapter relating to finding line segments, gradients, and midpoints of those line segments

Formulas

General Formula of a Line	$Ax + By + C = 0$
Slope Intercept Formula of a Line	$y = mx + c$
Point-Slope Formula	$y - y_1 = m(x - x_1)$
The slope of a Line Using Coordinates	$m = \Delta y/\Delta y = (y_2 - y_1)/(x_2 - x_1)$
The slope of a Line Using a General Equation	$m = -(A/B)$
Intercept-Intercept Formula	$x/a + y/b = 1$
Distance Formula	$\|P1P2\| = \sqrt{[(x_2 - x_1)^2 + (y_2 - y_1)^2]}$
For Parallel Lines	m1 = m2
For Perpendicular Lines	m1m2 = -1
Midpoint Formula	$M(x, y) = [½(x_1 + x_2), ½(y_1 + y_2)]$