Section 1.2

I. Slope of straight line through \( P_1(x_1, y_1), \ P_2(x_2, y_2) \) \[ m = \frac{y_2 - y_1}{x_2 - x_1} \]

Order is important

II. Forms of the equation of a straight line

   a. General Form \( Ax + By + C = 0 \)

   b. Slope-Intercept \( y = mx + b \) “Analysis”

   c. Point-Slope \( y - y_0 = m(x - x_0) \) “Construction”

III. Parallel vs Perpendicular lines

Examples

IV. Intersection of two straight lines \((0, 1, \infty)\)

Examples (35, 39)