1 Pre-lab2

Name: MENG Di

• Given two points (x 1 , y 1) and (x 2 , y 2), compute the line parameters (a, b, c).

$$a = y_1 - y_2$$

$$b = x_2 - x_1$$

$$c = \left(\frac{y_2 - y_1}{x_2 - x_1} * x_2 - y_2\right) * \left(x_2 - x_1\right)$$

• Given a line (a, b, c) and a point (x, y) compute the distance from the point to the line.

$$dist = \frac{ax + by + c}{\sqrt{a^2 + b^2}}$$