

4. The table below summarizes three commonly used mathematical models of nonvertical straight lines.

Mode	Equation	Given
Two-point form	$m = \frac{y_2 - y_1}{x_2 - x_1}$	$(x_1, y_1), (x_2, y_2)$
Point-slope form	$y - y_1 = m(x - x_1)$	$m, (x_1, y_1)$
Slope-intercept form	$y = mx + b$	m, b

Design and implement a program that permits the user to convert either two-point form or point-slope form into slope-intercept form. Your program should interact with the user as follows:

Select the form that you would like to convert to slope-intercept form:

- 1) Two-point form (you know two points on the line)
 - 2) Point-slope form (you know the line's slope and one point)
- => 2

Enter the slope=> 4.2

Enter the x-y coordinates of the point separated by a space=> 1 1

Point-slope form

$$y - 1.00 = 4.20(x - 1.00)$$

Slope-intercept form

$$y = 4.20x - 3.20$$

Do another conversion (Y or N)=> Y