Chapter 5: Writing Linear Equations
Study Guide (Reg)

5.1: Write equations of lines given slope and y – intercept or two points
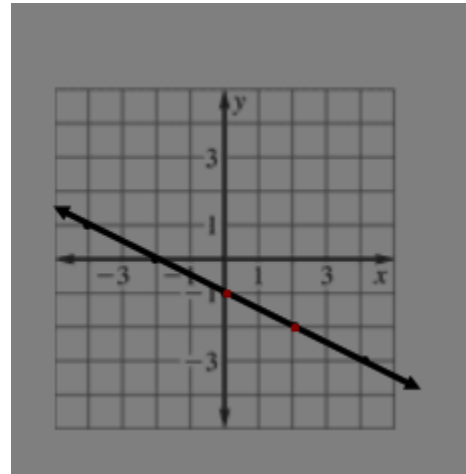
Write the equation of the line with the given information:

Ex: Slope: 0, y – intercept: ½

Ex: Passes through (0, 5) and (1, 7)

Ex: (1, −9) and (0, −11)

Ex:

5.2: Write the equation of lines given slope and one point, or two points

Write the equation of the line with the given information:

Ex: Slope 3, passes through (1, 1)

Ex: Slope −5, passes through (−4, 7)

Ex: Passes through (1, 4) (2, 7)

Ex: Passes through (−2, −2) (1, −1)

Ex: (3, 1) (–3, –1)   **Ex:** (1, 5) (–7, 5)

Ex: Passes through (−1, 1), (−7, 7)   **Ex:** (3, 1) and (6, 4)

Ex: You are taking a Tae Kwon Do class that costs $15 a month. In addition, you needed to purchase a uniform. You paid a total of $108 after 6 months.

    a.   Find the cost of a uniform. Show or explain your work.

    b. Write an equation that gives the total cost (in dollars) as a function of the length of time you have been taking classes (in months).

    c. Find the total cost after 9 months.

Ex: A delivery service charges a base price for an overnight delivery of a package, plus an extra charge for each pound the package weighs. A customer is billed $22.85 for shipping a 3-lb package and $40 for shipping a 10-lb package.

    a. Write an equation that gives the total cost for shipping a package of any weight.

    b. Then find the cost of shipping a 15-lb package.