

Complete numbers 3 and 4 on your notes page.

3) The equation $y = 10x + 25$ gives the amount y (in dollars) in your savings account after x weeks.

a. Identify the independent and dependent variable.

The independent variable is x , the number of weeks you put money into your savings account.

The dependent variable is y , the amount of money in your savings account.

b. How much is in your savings account after 8 weeks?

$$y = 10(8) + 25$$

$$y = 80 + 25$$

$$y = 105$$

You will have \$105 in your savings account.

Complete numbers 3 and 4 on your notes page.

- 4) You buy a new phone for \$350. Your cell phone service costs \$30 each month. The equation $y = 350 + 30m$ gives the amount of money you will pay for your phone and service after m months.

- a. Identify the independent and dependent variables.

The independent variable is m , the number of months of service you use.

The dependent variable is y , the amount of money you owe.

- b. How much will you pay after 5 months?

$$y = 350 + 30(5)$$

$$y = 350 + 150$$

$$y = 500$$

You will pay \$500 for 5 months.

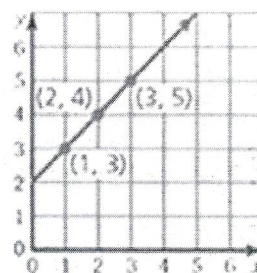
Key Idea

You can use tables and graphs to represent equations in two variables.

$$y = x + 2$$

Independent Variable, x	Dependent Variable, y	Ordered Pair, (x, y)
1	3	(1, 3)
2	4	(2, 4)
3	5	(3, 5)

When you draw a line through the points, you graph ALL solutions!



Complete numbers 5 - 6 in your composition book.

5) The perimeter of a square is 4 times its side length.

- a. Write an equation using 2 variables to find the perimeter of a square.

$$y = 4x$$

- b. Identify the independent and dependent variables.

dependent variable: y , the perimeter of the square
independent variable: x , the length of a side

- c. What is the perimeter of a square that has a side length of 44 inches?

$$y = 4x$$

$$y = 4(44)$$

$$y = 176$$

The perimeter is 176 inches.

- d. Graph the equation.

Perimeter of a Square

