4-5 Writing a Function Rule

Write a function rule that represents each situation:

1. y is 9 less than the quotient of 6 and x

$$y = \frac{6}{x} - 9$$

2. 3 less than four sevenths of x is y

$$y = \frac{4}{7}x - 3$$

3. The time (T) run by a cross-country runner (in minutes) is a function of the number of laps (L) run on the track, at the rate of 1.75 minutes per lap.

$$T = 1.75L$$

4. The cost (C) of a concrete pump is $75 per hour plus a $100 one-time fuel charge.

$$C = 75h + 100$$

5. Write a function rule for the area (A) of a rectangle with a height that is 1 more than triple its base (b).

$$A = b(3b + 1)$$