Post 1

Calculate your water bill under the following conditions.

- To determine T, choose a month and do an internet search for the average daily temperature in your area.
- Choose a lawn area, A, between 200 ft^2 and 5000 ft^2.
- For N, use the number of people living in your home.
- Using the same month you used to find T, find R by doing an internet search for the average monthly rainfall (in inches) in your area.

Show the original equation and all steps used to solve it. Since this is a money amount, remember to give your answer in dollars and cents.

Post 1 Example

NOTE: Not all parts of the Discussion are included in this Example. Read the Discussion Question thoroughly and respond to all parts of the Question.

In the equation, W is the amount of the water bill, T is the average daily temperature for the month, A is the area of the lawn, N is the number of people living in the home, and R is the average monthly rainfall in inches. I chose the following for my variables.

T = 72 degrees
A = 1200 ft^2
N = 2
R = 4 inches

Using these values, the calculation is as follows.

$$W = \frac{0.0026(T)(A)\sqrt{N}}{R}$$
$$W = \frac{0.0026(72)(1200)\sqrt{2}}{4}$$
$$W = \frac{317.6889347}{4}$$
$$W = 79.42223366$$
$$W \approx \$79.42$$

The water bill will be $79.42.