Answer on Question #47739 - Math - Algebra

You spent 85,489 dollars. If you make 10,153 dollars per week how many weeks will it take you to make twice what you spent?

Solution:

In our problem we need to find number of weeks in order to earn an amount of twice more than the original amount spent.

Let x will be the number of week that we need to find. According to the condition of the task we know that every week we make \$10.153, this mean we can write the following 10.153x we do every week. We can also note that twice amount of what we spent, which will be equal to

$$\$85.489 \cdot 2 = \$170.978$$

Then we can calculate the number of weeks, we obtained the following equation:

$$10.153x = 170.978$$

From the given equation we find the value of x.

$$x \approx 16.840$$

Thus we can note that to make twice what we spent we need 17 weeks.