Lab #2

You must use variables for every single data.

Write a program that calculates the total amount of energy burnt running, playing basketball and sleeping for certain number of hours.

One way to measure the amount the energy that is expended during exercise is to use metabolic equivalents (MET). Here are some METS for various activities:

Running 6 MPH: 10 METS
Basketball: 8 METS
Sleeping: 1 MET

The number of calories burned per minute may be estimated using the formula:

Calories/Minute = 0.0175 x MET x Weight in Kilograms

Write a program that calculates and outputs the total number of calories burned for a 150-pound person who

Runs 6 MPH for 30 minutes
Plays basketball for 30 minutes
Sleeps for 6 hours

Note: One kilogram is equal to 2.2 pounds.

Steps to solve the problem.
1. Create a method called calories,
   a. In this method declare the following variables. What should be the data type for each of the variables
      i. runMet = 10
      ii. basketBallMet = 8
      iii. sleepMet = 1
   b. calculate calories burned per minute for running using the underlined formula, then calculate the calories for running 30 minutes
   c. calculate calories burned per minute for playing basketball using the underlined formula, then calculate the calories for playing 30 minutes
   d. Calculate calories burned per minute for sleeping using the underlined formula, then calculate the calories for sleeping 6 hours. Make sure to convert the hours to minutes.
   e. Add the result from a, b, and c. this would be the total calories burned.
      i.
   f.
Here is a sample output

 ----jGRASP exec: java MET
You are 127.0 pounds
you are 57.72727272727272 kilo garms.

you ran for 40 minutes.
played basketball for 40 minutes
You slept for 7 hours
Total calories burned is : 1151.6590909090908

 ----jGRASP: operation complete.

 ----jGRASP exec: java MET
You are 110.0 pounds
you are 49.99999999999999 kilo garms.
you ran for 20 minutes.
played basketball for 35 minutes
You slept for 8 hours
Total calories burned is : 840.0

 ----jGRASP: operation complete.

 ----jGRASP exec: java MET
You are 145.0 pounds
you are 65.9090909090909 kilo garms.
you ran for 55 minutes.
played basketball for 15 minutes
You slept for 5 hours
Total calories burned is : 1118.8068181818182