

# [Answer questions](https://assignbuster.com/answer-questions-essay-samples-8/)

[Family](https://assignbuster.com/essay-subjects/family/)

Weight conversion: Pounds to kilograms (kg) --- weight in pounds 2. 2 = weight in kg Height conversion: Feet to inches--- 1 foot = 12 inches (5’6” = 66 inches)
Inches to meters (m) = 1 inch = 0. 0254 (5’6” = 66 inches = 1. 6764 m)
Inches to centimeters (cm) --- inches x 2. 54 (66 inches x 2. 54 = 167. 64 cm)

For all questions that involve math, you must show your math work to receive full credit.
1. What is your BMI [weight (kg) ÷ Height (m2)]? Refer to your textbook and determine your BMI classification. Calculate your BMI (show your work) and indicate your BMI classification in the space below.
BMI= 75/(1. 5752)= 30. 2
My BMI is 30. 2 , indicating my weight is in the obese
2. Using the Harris-Benedict Equation provided below, calculate your BMR by using the following formula (note: this formula is gender-specific!).
For Women: BMR = 655 + (4. 35 x weight in pounds) + (4. 7 x height in inches) - (4. 7 x age in years)
For Men: BMR = 66 + (6. 23 x weight in pounds) + (12. 7 x height in inches) - (6. 8 x age in years)
Show your work:
As a women
BMR= 655+(4. 35\*165)+(4. 7\*62)- (4. 7\*37)
BMR= (655+717. 75)+291. 4-173. 9
BMR= 1372. 75+291. 4-173. 9
BMR= 1490. 25
Your BMR is:
3. Next, to calculate your total kcal needs for the day. To do this, multiply your BMR (your answer from the previous question) by an activity factor that you select below and a stress factor (SF) from the chart below. Unless you are recovering from surgery or major injury, assume that your stress factor is one.
Light exercise (1-3 days per week)
= BMR x 1. 375
x (SF)
Moderate exercise (3-5 days per week)
= BMR x 1. 55
x (SF)
Heavy exercise (6-7 days per week)
= BMR x 1. 725
x (SF)
Very heavy exercise (twice per day, extra heavy workouts)
= BMR x 1. 9
x (SF)
Show your work: 1490. 25 x 1. 375= 2049 per day calories
1490. 25 x1. 375 x1. 2=
Your calculated kcal needs for the day are
4. Then calculate your total kcal needs for the day using the Mifflin-St. Jeor equation. It is also gender specific. Use the activity factor and stress factor charts provided in question #3.
For Men:
BMR=(10 x weight in kg) + (6. 25 x height in cm) – (5 x Age in years) + 5 =

For Women:
BMR= (10 x weight in kg) + (6. 25 x height in cm) – (5 x Age in years) – 161 =
Then, multiply your calculated BMR from above by the activity factor and stress factor you selected in question #3. This will indicate your kcal needs for the day using the Mifflin-St. Jeor equation. Show your work (remember to use the activity factor).
1. 375 x 1388. 3 x 1. 2
Your caloric needs using Mifflin-St. Jeor: 1388. 3X 1. 375 x 1. 2= 2290. 2
5a)Were you surprised by these answers regarding your calculated needs? Why or why not? What do you expect to happen with regard to your caloric needs as your age increases?
I am not surprised at the figures resulting from calculated kcal needs since they are around the recommended needs for my figure which is 2, 000kcal. However, I am slightly above the recommended kcal needs because of my size (weight and height) which indicates that I am overweight (obese). This indicates that I need more calories than an average woman.
as my age increases my kcal needs will increase because of the increase in the number of activities; usually needing more calories.
5b)How do the caloric needs compare? Are they similar or different (are they within 50-100 calories of each other?)
The caloric needs calculate by using Mifflin-St. Jeor and Harris-Benedict Equation are different because they have a difference of slightly more than 100 calories (168. 71).