

# Body Mass Index (BMI) Calculator

BMI is a measure of body fat based on height and weight. This measurement applies to adult men and women. The following files are required:

- **bmi.html** (this is a HTML file containing the user interface, namely, a form as shown in figure 1.)
- **bmi.css** (style for the form)
- You may embed your JavaScript inside **bmi.html** or write an external JavaScript called **bmi.js** and refer to it from **bmi.html**

The formula for computing BMI is:

**Weight in pound**

**Height in inch**

$$\text{BMI} = \frac{\text{Weight (LB)}}{(\text{Height (IN)})^2} \times 703$$

Build the HTML page as shown in figure 1. Use CSS for the styles/alignments. In the HTML file, in addition to the required attributes use the following attributes for the three input fields:

- **required** keyword
- **type="number"**, it simply means the fields must have values and only numeric respectively.
- **id** and **name** attributes

For the button, make sure the *type* attribute is set to "button" and the *onclick* event calls the calculateBMI function, i.e. `onclick="calculateBMI()"`.

You will need to write the calculateBMI() function using JavaScript language.

In calculateBMI() function you will extract data (numbers) from those three inputs, namely, *feet*, *inches* and *pound* and calculate the BMI using the above formula.

Notice the table in figure 1, it is static (hard-coded table tags/elements). The only dynamic value is the result shown between the form and the table as shown in figure 2.

The text right above the table can be one of the following: *Underweight*, *Normal*, *Overweight*, or *Obese*, these are determined from the calculated BMI.

You may use *Math.round()* to round your BMI result to one decimal point so you can compare it with acceptable data in the table and determine whether the user is underweight, overweight, obese, or normal.

Things to watch: height must be in inch, therefore convert foot to inch. Convert user's input to integer or float before any calculation.

There is no exact width of the form and its children but make it as close as possible to figure 1.

BMI

File

# Body Mass Index Calculator

Your Height:

Feet:

Inch(es):

Your Weight:

Pounds:

Calculate

IT330, The University of Kansas, Edwards Campus

Underweight	< 18.5
Normal weight	18.5 - 24.9
Overweight	25 - 29.9
Obesity	30 or greater

Figure 1, before data entry

BMI

Body Mass Index Calculator

Your Height:

Feet: 5

Inch(es): 8

Your Weight:

Pounds: 115

Calculate

IT330, The University of Kansas, Edwards Campus

Your Height: 5' 8"

Your Weight: 115 LB

Your BMI: 17.5

Underweight

Underweight	< 18.5
Normal weight	18.5 - 24.9
Overweight	25 - 29.9
Obesity	30 or greater

Figure 2, after data entered