BMI - Excel Assignment

Part 1:

Create an Excel Worksheet which calculates a person's Body Mass Index (BMI). (See BMI on Wikipedia for more info about BMI.) The spreadsheet should allow a person to type his/her weight (in pounds) in one cell and his/her height (in inches) in another cell, and it should then calculate and display that person's BMI. You only have to make it calculate for one person. The main purpose of this assignment is to develop the formula. Name your workbook **yourname-BMI**.

BMI Summary

- Formula: weight (lb) / [height (in)]^2 x 703
- Calculate BMI by dividing weight in pounds (lbs) by height in inches (in) squared and multiplying by a conversion factor of 703.
- Example: Weight = 150 lbs, Height = 5'5" (65")

   Calculation: [150 ÷ (65)^2] x 703 = 24.96

- hint: if you don't know how to square an item, do a Google search and find out, or you can simply multiply it by itself.

Testing Your Results

First, enter the weight and height in the example (above) -- Weight = 150 lbs, Height = 65 inches-- and make sure the result you get is the same -- 24.96. Next, try entering several heights and weights and make sure it calculates properly.

Submitting Your Assignment

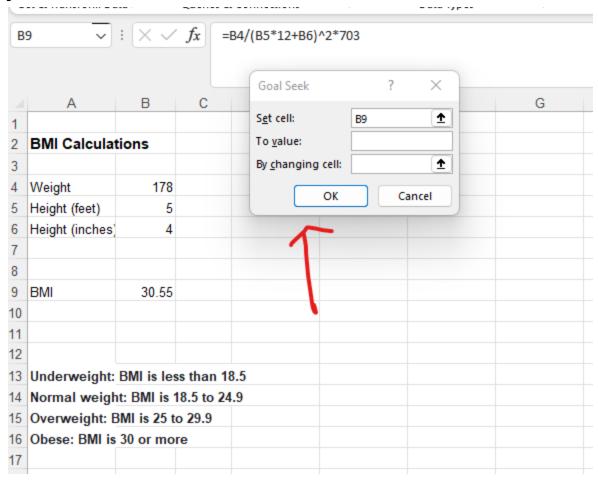In Blackboard, submit the Excel workbook **yourname-BMI**.

Part 2: Using Goal Seek (wait until your instructor tells you to complete part 2)

1. Watch the video <u>Using Goal Seek in Excel</u> and then create the following spreadsheet using the BMI calculation as shown in the video.

	A	B	C	D
1				
2	**BMI Calculations**			
3				
4	Weight	160		
5	Height (feet)	5		
6	Height (inches)	5		
7				
8				
9	BMI	26.62		
10				
11				
12				
13	Underweight: BMI is less than 18.5			
14	Normal weight: BMI is 18.5 to 24.9			
15	Overweight: BMI is 25 to 29.9			
16	Obese: BMI is 30 or more			

2. Use Goal Seek feature of Excel to see what this person's weight would need to be to reach "normal" BMI of 24.9
3. Take a screenshot showing your spreadsheet with the completed Goal Seek, similar to the following screenshot, but with the correct Goal Seek information for this problem. Name the screenshot

yourname-Goal Seek

B9   =B4/(B5*12+B6)^2*703

Goal Seek   ?   ×

Set cell: B9
To value:
By changing cell:

OK   Cancel

	A	B	C	G
1				
2	**BMI Calculations**			
3				
4	Weight	178		
5	Height (feet)	5		
6	Height (inches)	4		
7				
8				
9	BMI	30.55		
10				
11				
12				
13	Underweight: BMI is less than 18.5			
14	Normal weight: BMI is 18.5 to 24.9			
15	Overweight: BMI is 25 to 29.9			
16	Obese: BMI is 30 or more			
17				

4. Save your workbook as **yourname-BMI-GoalSeek**.

Submitting Your Assignment

In Blackboard, for BMI Goal Seek assignment, submit the following:
1. Excel workbook **yourname-BMI-GoalSeek**
2. Screenshot **yourname-Goal Seek**