Use the provided “BMI” dataset to answer the following questions:

1. The image below shows a portion of the BMI dataset. What is the name of the cell that contains the information on the Average BMI of United States women in 1985?



A) C1
B) D1
C) C12
D) D12

*For incorrect answer: Please refer to the “Basics” tab on the Tutorial for information on the basic layout of spreadsheets and cells.*

2. BMI is conventionally measured with the metric units of kg/m2. If BMI is measured using Imperial units of lbs/in2, it must be multiplied by a factor of 703 to convert it to the metric units. Which of the following formulae would you use to convert a BMI measurement in cell B2 from Imperial to metric units?

A) =B2/703
B) =B2+703
C) =703-B2
D) =B2\*703

*For incorrect answer: Please refer to the “Formulae” tab on the Tutorial for information on how to input mathematical operations as formulae.*

3. Which of the following functions is used to calculate the mean of a set of data?
A) =AVERAGE(
B) =SUM(
C) =STDEV(
D) =COUNT(

*For incorrect answer: Please refer to the “Functions” tab on the Tutorial for information on how to calculate the mean of a set of data.*

4. What was the average (mean) BMI for all Americans (both male and female) in 2000? You should round your answer to two decimal places.

A) 26.89

B) 27.53
C) 27.62
D) 27.71

*For incorrect answer: Please refer to the “Functions” tab on the Tutorial for information on how to calculate the mean of a set of data.*

5. What was the average (mean) BMI for male Americans in the 1980s (1980-1989)? Your answer will be in kg/m2, and you should round to two decimal places.

(*Hint: You will want to sort the data before you calculate the average.*)

25.97

*For incorrect answer: Please refer to the “Functions” tab on the Tutorial for information on how to calculate the mean of a set of data, or to the “Sorting” tab for information on how to sort a set of data. You may also want to refer to the “Format” tab for information on how to show a particular number of significant figures.*

6. What was the standard deviation of BMI for female Americans in the 1990s (1990-1999)? Your answer will be in kg/m2, and you should round to two decimal places.

(*Hint: You will want to sort the data before you calculate the standard deviation.*)

0.36

*For incorrect answer: Please refer to the “Functions” tab and then the “Standard Deviation” tab on the Tutorial for information on how to calculate the standard deviation of a set of data, or to the “Sorting” tab for information on how to sort a set of data. You may also want to refer to the “Format” tab for information on how to show a particular number of significant figures.*

7. You are interested in investigating if BMI in the United States has changed for men between 1980 and 2000, and want to represent this as a bar graph. You plan to make one bar showing the average BMI of men in the 1980s, and one bar showing the average BMI of men in the 1990s. Describe the axis labels you would use on this bar graph:

A) X-axis: year, Y-axis: BMI
B) X-axis: BMI, Y-axis: sex
C) X-axis: sex, Y-axis: year
D) X-axis: BMI, Y-axis: year

*For incorrect answer: Please refer to the “Bar Graph 2” tab on the Tutorial for information on how to set up a bar graph.*

8. You are interested in investigating if BMI in the United States has changed for men between 1980 and 2000, and want to represent this as a bar graph. You plan to make one bar showing the average BMI of men in the 1980s (1980-1989), and one bar showing the average BMI of men in the 1990s (1990-1999). How would you arrange the data so that you could use a spreadsheet to draw a bar graph?

A) 
B) 
C) 
D) 

*For incorrect answer: Please refer to the “Bar Graph 2” tab on the Tutorial for information on how to set up a bar graph.*

9. If you were to graph the data as described in Question 8, what would the resulting graph look like?

A)
B) 
C)

D)

*For incorrect answer: Please refer to the “Bar Graph 2” tab on the Tutorial for information on how to set up a bar graph.*

10. When you place custom error bars on a bar graph, which of the following values do you use to draw the error bars?
A) Raw data
B) Standard deviation
C) Average
D) Median

*For incorrect answer: Please refer to the “Error Bars” tab on the Tutorial for information on what values are used to draw error bars.*