The United States is becoming more health conscious, and as a result, the problem of obesity has gotten more attention. The Body Mass Index (BMI), relates a person’s height and weight, and is often used to determine if someone is overweight. The table below tells the weight status for a given BMI.

|  |  |
| --- | --- |
| **BMI** | **Weight Status** |
| Below 18.5 | Underweight |
| 18.5 - 24.9 | Normal |
| 24.9 - 29.9 | Overweight |
| 29.9 and above | Obese |

The BMI is calculated using the formula:

* BMI = 703\*w / h2 where w is the weight in pounds and h is the height in inches.

Solving this formula for h, we see that h = sqrt [703w/BMI]

1. Find the weight of your favorite celebrity. This could be a movie or television personality, athlete, politician or even yourself.

2. Using the weight from part 1, determine the height the celebrity would need to be in order to fall into each of the four weight status categories listed in the table. In other words, select a BMI less than 18.5 (any value, you make it up) and find “h”; then repeat using a new BMI in the range from 18.5 to 24.9, and so on.

3. Using the internet or other Library resource, find the actual height of the celebrity.

4. Determine his or her actual weight status (underweight, normal, overweight or obese) using the original BMI formula at the top of the instructions.

5. How tall would he or she need to be for the normal weight status?

6. Think about why there may be differences in your calculations and the actual figures.

7. Summarize your findings in writing using proper style and grammar.