Weight Composition
Formulas

IN CLASS ACTIVITY
BMI Formula

\[
\text{(Weight in Pounds/Height in Inches squared in}^2\text{)} \times 703
\]

\[
\frac{lbs}{in^2} \times 703
\]
Ex: Joe is 5’6 and 189 pounds

\[
\frac{189}{66^2} \times 703
\]

\[
\frac{189}{4356} \times 703 = 0.0433 \times 703 = 30.5
\]

What is Joe’s BMI classification?
BMI Classifications

- Underweight = below 18.5
- Healthy Weight = 18.5-24.9
- Overweight = 25-29.9
- Obese = 30 or more
Joe is Obese
Waist to Hip Ratio

• Waist divided by Hip

\[ \frac{w}{h} \]
Calculate Joe’s Waist to Hip Ratio

• Joe’s waist 44 inches
• Joe’s Hips 40 inches

\[
\frac{44}{40} = 1.1
\]

• Is Joe within a healthy range for his w/h ratio?
Waist to Hip Ratio Healthy Range

• MEN: 0.9 or less

• WOMEN: 0.8 or less

• A high waist circumference is 40 inches or more for a man and 35 inches or more for a woman.
• NO! Joe does NOT have a healthy w/h ratio.
Practice Questions

• Jane is 5’9 and weighs 132 pounds, her waist is 32 inches. What is Jane’s BMI?

• Ben is 6’0 and weighs 185 pounds. Is he classified as overweight? If not, what is he classified as?

• Penny has a waist circumference of 38, but her BMI is 24, should she be concerned about her health? Why?

• Bob’s waist is 35in and his hips are 37in, is his W/H ratio healthy?

• Betty’s hips are 37in and her waist is 34in, what is her W/H ratio?
Answers!

• Provided in CLASS!!!!