MathWalk

#3) Measure Yosef!
Tasks:
   a) Go to the Yosef statue and see how you measure up. How many times do you think Yosef is taller than you? Write down your guess on the line below before you continue.

I think Yosef is _____ times taller than me.

      Yosef is so tall we couldn't figure out a way to measure his whole height without a ladder! Instead, we measured the length of his leg to his belt (the yellow line on Fig 5). If you measure from the ground to where a person's hip bends, that is approximately 50-55% of the average person's height. Of course, some people are "all leg" and some are "all body" while others are about half and half. Do you know where most of your height is?

   b) measure your ground-to-hip height and figure out what percentage that is of your height. To figure out how many times taller Yosef is than you are, you can either compare his ground-to-hip height to yours or, if your legs are not 50-55% of your total body height, you can compare Yosef's total height (using 55% as the percent his legs are of his total height) to your total height.

$$\frac{Yosef's\ ground-to-hip\ height}{Your\ ground-to-hip\ height}\ OR\ \frac{Yosef's\ total\ height}{Your\ total\ height} = How\ many\ times\ taller\ Yosef\ is$$

Fig 5: Yosef's statue

According to the optimum stride length for someone running as fast as they can is 2.3-2.5 times their leg length for females and 2.5-2.7 times their leg length for males.

   c) What would your optimum stride length be? What would Yosef's be?