

Name: _____

Show work needed to justify your answer.

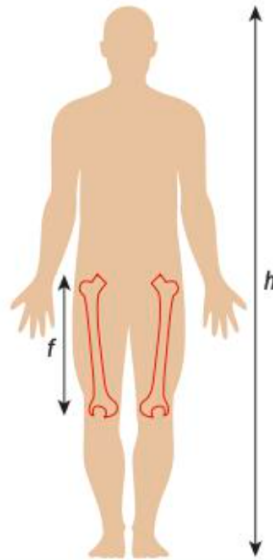
Date: _____


HW: # 4a: Math IBSL - Standard 4 - Domain and Range of Functions

5 points

- 1 a A plumber charges \$40 for a service call plus \$21 an hour. Write a function that represents this situation and define the variables you used.
- b State a reasonable domain and range for this situation.
- c How much will you have to pay the plumber if he is at your house for four hours?

- 2 Forensic scientists can determine the height of a person based on the length of their femur. The equation is $h(f) = 2.47f + 54.10$, where f is the length of the femur (cm) and h is the person's height (cm).



- a Use your GDC to sketch a graph of this function.  Label the axes.
- b State a reasonable domain and range for this function.
- c Determine the height of a person with femur length of 51 cm.
- d If someone is 161 cm tall, what is the length of their femur?