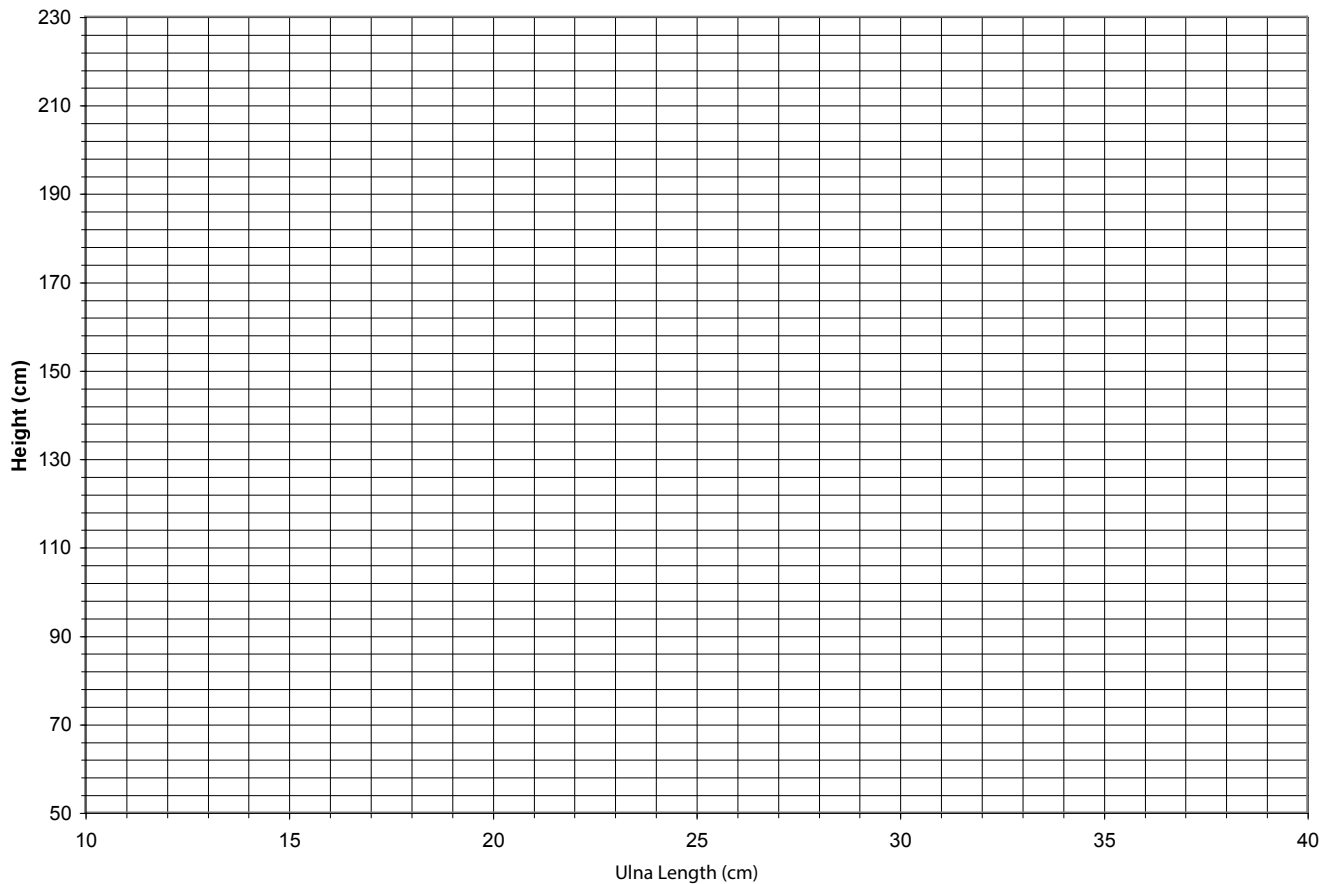


# Forensic Bones Worksheet

## Data Table

Person	Length of Ulna (cm)	Height (cm)		Height (inches)		Height (feet and inches)	
		Male	Female	Male	Female	Male	Female
A							
B							
C							
D							
E							
F							

## Graph



# Forensic Bone Worksheet (Cont'd)

## Post-Lab Analysis and Questions

1. Review the graph. What kind of mathematical relationship seems to exist between the length of the ulna and the height of an individual?
2. Convert each person's height in inches to the more common height in feet and inches. Remember that the whole number is the number of feet but the remainder should be in inches for example  $62'' = 5.16$  which is  $5' 2''$  not  $5' 16''$ .
3. Use the ruler to measure the length of your ulna. (It is the longest bone in your forearm. Measure from the end of the bone at your wrist to the end of your elbow bone.) Record the length of your ulna in the space below. Then use the graph you constructed earlier to predict your height in cm. Use the tape to measure your actual height if you do not know it.

Ulna length \_\_\_\_\_ cm

Predicted height \_\_\_\_\_ cm

Actual height \_\_\_\_\_ cm

Was the graph a good predictor of your height? How might it be made better?

4. Lonesome, Missouri is a very small town. The police department has three missing persons on record since 1942. Recently, a skeleton was found in an abandoned salvage yard. The skeleton was not intact and many bones had been eaten by rodents. The ulna from a forearm was still intact enough to be measured for length. Police estimate the ulna to be approximately 26.5 cm in length. Which missing person might be the best individual to consider as a match for the skeleton? Justify your choice.