

Name Hannah ShultzDate 27 January 2014Period 6<sup>th</sup>

Pelvis							
Trait	Pelvis 1	Pelvis 2	Pelvis 3	Female	Male		
Sub-Pubic Angle	80°	98°	100°	> 90°	< 90°		
Pubis Body Width	20.5	45.2mm	36.0	~40 mm	25-30 mm		
Greater Sciatic Notch	70°	65°	70°	> 68°	< 68°		
Pelvic Cavity Shape	heart shaped	circular	circular	Circular and Wide, Showing Mainly coccyx	Heart shaped, showing sacrum and coccyx		
Cranium							
Trait	Cranium 1	Cranium 2	Cranium 3	Cranium 4	Cranium 5	Female	Male
Upper Edge of Eye Orbit	Sharp	Blunt	Blunt	Blunt		Sharp	Blunt
Shape of Eye Orbit	Round	Round	Square	Square		Round	Square
Zygomatic Process	Not Beyond	Not Beyond	Beyond	Beyond		Not beyond external Auditory Meatus	Beyond external auditory meatus
Nuchal Crest	Smooth	Smooth	Rough	Rough		Smooth	Rough and Bumpy
Occipital Protuberance	Absent	Absent	Present	Generally Absent		Generally Absent	General Present
Frontal Bone	Low	Round	Low	Round		Round, Globular	Low, Slanting
Mandible Shape	V	V	Square	Square		Rounded, V-shape	Square, U-Shape
Ramus of Mandible	Slanting	Slanting	Straight	Slanting		Slanting	Straight
Femur							
Trait	Femur 1	Femur 2	Female	Unknown	Male		
Vertical (Max) Diameter of the Femoral Head	44.0	44.0	< 43.5	43.5-44.5	> 44.5		
Bicondylar Width (mm)	76.5	80.0	< 74	74-76	> 76		
Maximum Length (mm)	409	442	< 405	405-430	> 430		
Humerus							
Trait	Humerus 1	Humerus 2	Avg. Female	Avg. Male			
Transverse Diameter of Humeral Head (mm)	36.0	37.9	37.0-39.0	42.7-44.7			
Vertical Diameter of Humeral Head (mm)	40.0	44.0	42.7	48.8			
Max Length (mm)	304	309	305.9	339			
Epicondylar Width (mm)	53.8	65.4	56.8	63.9			

**Height Determination Femur and Humerus**

A) **Femur** Maximum Length of Femur (from page 1) = 44.2 cm

	MALE				FEMALE			
	Regression Formula	Height cm	Height Inches	Approx. Height (Ft & in)	Regression Formula	Height cm	Height Inches	Approx. Height (Ft & in)
Caucasoid	2.32 (MLF) + 65.53	168	66	5' 6"	2.47 (MLF) + 54.1	163.27	64.28	5' 4"
Mongoloid	2.15 (MLF) + 72.57	167.6	65.98	5' 6"	Formula N/A	N/A	N/A	
Negroid	2.10 (MLF) + 72.22	165.04	64.9	5' 4"	2.28 (MLF) + 59.76	160.54	63.2	5' 3"

**Height Determination Femur and Humerus**

B) **Humerus** Maximum Length of Humerus (from page 1) = 30.4 cm

	MALE				FEMALE			
	Regression Formula	Height cm	Height Inches	Approx. Height (Ft & in)	Regression Formula	Height cm	Height Inches	Approx. Height (Ft & in)
Caucasoid	2.89 (MLH) + 78.10	165.95	65.3	5' 5"	3.36 (MLH) + 57.97	160.1	63	5' 3"
Mongoloid	2.68 (MLH) + 83.19	164.66	64.83	5' 5"	Formula N/A	N/A	N/A	
Negroid	2.88 (MLH) + 75.48	163.03	64.19	5' 3"	3.08 (MLH) + 64.67	158.3	62.3	5' 2"

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

Skull 1			Skull 2			Skull 3		
Nasal Width	<u>23.5</u> mm		Nasal Width	<u>29.0</u> mm		Nasal Width	<u>26.9</u> mm	
Nasal Height	<u>27.0</u> mm		Nasal Height	<u>26.9</u> mm		Nasal Height	<u>29.0</u> mm	
<b>Cranium</b>								
Trait	<b>Cranium 1</b>	<b>Cranium 2</b>	<b>Cranium 3</b>	<b>Caucasoid</b>	<b>Mongoloid</b>	<b>Negroid</b>		
Nasal Index	<u>0.87</u>	<u>0.81</u>	<u>0.92</u>	< .48	.48 - .53	> .53		
Nasal Spine	<u>very small spine</u>	<u>Prominent</u>	<u>some what prominent</u>	Prominent spine	Somewhat Prominent Spine	Very Small Spine		
Nasal silling/Guttering	<u>no ridge</u>	<u>Sharp</u>	<u>Sharp</u>	Sharp ridge (silling)	Rounded ridge	No Ridge (guttering)		
Prognathism	<u>Straight</u>			Straight	Variable	Prognathic		
Shape of Orbital Openings	<u>rectangular</u>	<u>square</u>	<u>rectangular</u>	Rounded, somewhat square	Rounded, somewhat circular	Rectangular		

**Femur**

**Caucasoid - fingers can fit under curvature of femur**

**Negroid - fingers cannot fit under curvature of femur**

**Age Determination by Femur, Humerus, Pelvis**

Refer to the Final Results "Age Determination" sheet for the analysis instructions. Only select **ONE** example of each bone for analysis.

A) Age Determined by the Pelvis (Pelvis 3) = 13-14

B) Age Determined by the Femur (Femur 2) = 20

C) Age Determined by the Humerus (Humerus 2) = 20