Name: _____ **Vitruvian Man Worksheet**

Leonardo da Vinci, a famous Italian renaissance inventor, engineer and painter, was greatly influenced in his work by Vitruvius. Leonardo wrote a treatise on human proportions in architecture, which included a description of ideal human body proportions as described by the Roman architect Vitruvius. Vitruvius was an architect and engineer within the Roman Empire following the death of Julius Caesar in the early reign of Augustus. He explored topics of style, proportion, acoustic, design and architecture. Vitruvius discovered a formula to model what he thought were ideal proportions for a man. Da Vinci used this ideal model when he was drawing the Vitruvian Man in the year 1490.

Vitruvius wrote,

"...in the human body the central point is naturally the navel. For if a man be placed flat on his back, with his hands and feet extended, and a pair of compasses centered at his navel, the fingers and toes of his two hands and feet will touch the circumference of a circle described therefrom. And just as the human body yields a circular outline, so too a square figure may be found from it. For if we measure the distance from the soles of the feet to the top of the head, and then apply that measure to the outstretched arms, the breadth will be found to be the same as the height..."

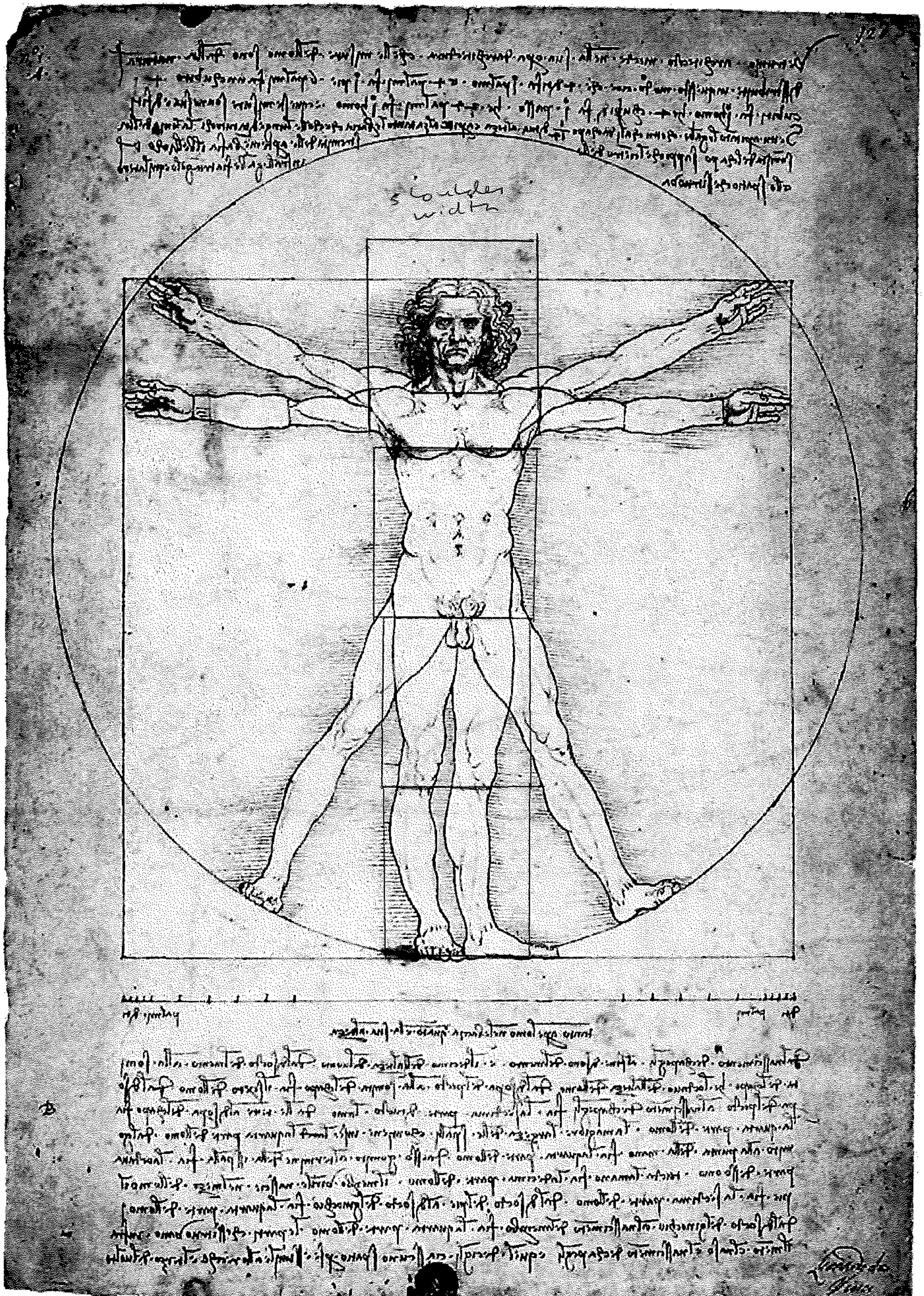
Your Task: Investigate Leonardo's and Vitruvius's theory of proportions regarding the human body based on real data collection. Work in groups of 3 or 4 (of same gender). Complete the chart below in **inches**.

Names	Height	Arm Span	Width of Shoulders	Top of Head to middle of chest	Middle of chest to top of his leg	Top of his leg to the bottom of his knee	Bottom of his knee to the bottom of his foot

Record the following in **inches**.

1. What is your height? _____
2. What is one-fourth (1/4) of your height? _____
3. Span of your arms? _____ Is it equal to your height? _____
4. Width of your shoulders? _____ Is it equal to ¼ of your height? _____
5. What Is the distance from the top of your head to the middle of your chest? _____ Is it equal to ¼ of your height? _____
6. What is the distance from the middle of your chest to the top of your leg? _____ Is it equal to ¼ of your height? _____
7. What is the distance from the top of your leg to the bottom of your knee? _____ Is it equal to ¼ of your height? _____
8. What Is the distance from the bottom of your knee to the bottom of your foot? _____ Is it equal to ¼ of your height? _____

Does your individual data lead you to accept or reject Vitruvius' hypothesis? _____


shoulder width