

An architect is designing a kitchen for a client. When designing a kitchen, the architect must pay special attention to the placement of the stove, sink, and refrigerator. In order for a kitchen to be utilized effectively, these three amenities must form a triangle with each other. This is known as the "work triangle." By design, the three parts of the work triangle must be *no less than 3 feet apart and no more than 7 feet apart*. Based on the dimensions of the current kitchen, the architect has determined that the sink will be 3.6 feet away from the stove and 5.7 feet away from the refrigerator. If the sink forms a  $103^\circ$  angle with the stove and the refrigerator, will the distance between the stove and the refrigerator remain within the confines of the work triangle?

