

One Saturday afternoon Ms. Hoppe and her husband were out walking through Riverfront Park and decided to stop enjoy the view at Inspiration Point. From this lookout some of the larger features of the park, including the 145ft Worlds Fair Pavilion and the 155ft Clock Tower are visible.

For some fun the Hoppe's decided to place bets on the distance between the Pavilion and the Clock Tower. Ms. Hoppe's guess was 250ft and Mr. Hoppe's guess was 350ft. Since physically measuring the distance was not going to be possible, the Hoppe's used their surveying skills to find angles of elevation to help find the winner of their bet. From the same spot on the lookout of Inspiration Point, the angle of elevation to the Pavilion is 21 degrees and the angle of elevation to the Clock Tower is 14 degrees. Also, the angle between the two landmarks is 18 degrees.

Whose guess was closer? How can you be sure?

