

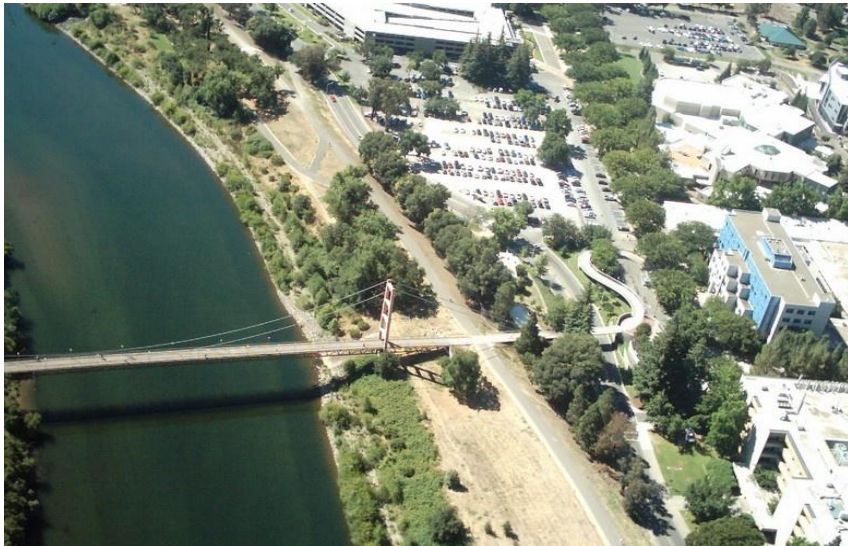
A photograph of a suspension bridge spanning a wide river. The bridge has a wooden deck and a tall, orange-painted tower on the right side. The background is filled with dense green trees under a cloudy sky. The text "Build a Bridge and Get Over It" is overlaid in white on the bridge deck.

Build a Bridge and Get Over It

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The GUY WEST BRIDGE

- Where is the Guy West Bridge?



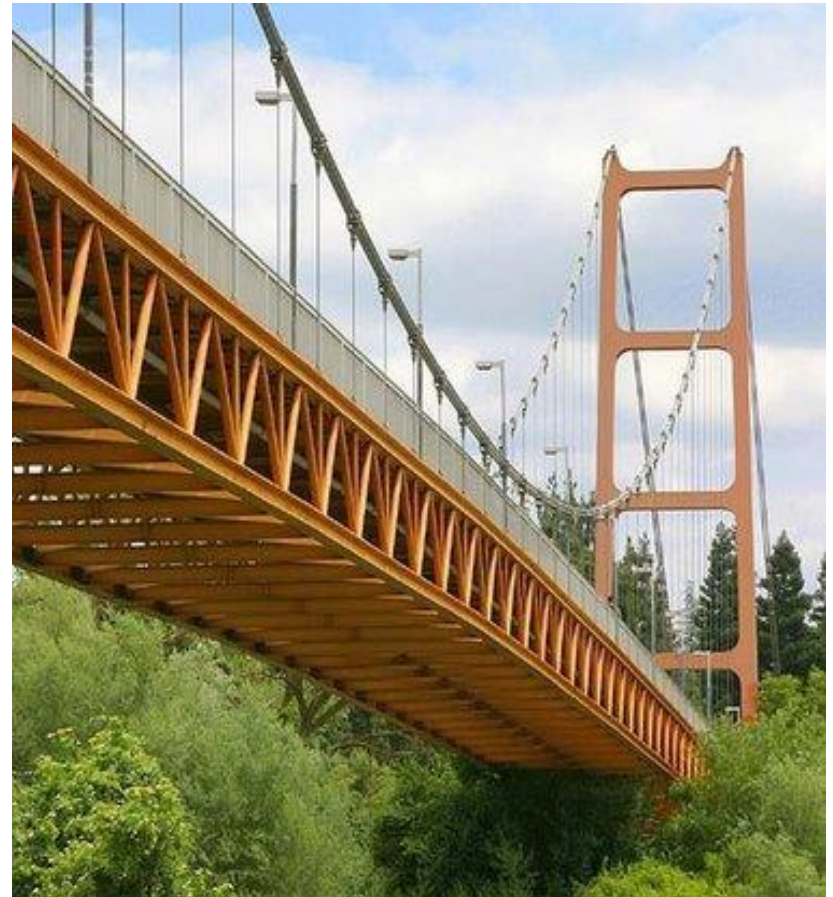
What does it resemble?



Why is it called “The Guy West Bridge”?

History of The Guy West Bridge

- The Guy West Bridge, built to replicate the Golden Gate Bridge, was first constructed in the fall of 1966 and finished in the spring of 1967, at the cost of six hundred thousand dollars at the time. The Guy West Bridge, built to connect the housing commons with the campus, was the first longest foot bridge in the United States at the time it was built. This bridge is located on the campus of California State University of Sacramento and goes across the American River, to the campus commons housing area. It was named after the first president of Sacramento State University, Guy West.



History of The Golden Gate Bridge



- The Golden Gate Bridge is a world-renown bridge, built in San Francisco. First constructed on January 5, 1933 and opened on May 28, 1937, the bridge took just over 4 years to build. It was built to cross over the golden gate strait, which is the entrance form the San Francisco Bay to the Pacific Ocean. In 2003, the cost of building the bridge would have been about 1.2 billion dollars. However the total cost would vary depending on many other various factors. The Golden Gate Bridge was the longest suspension span at the time of its construction.

Comparing the Guy West Bridge with the Golden Gate Bridge

- Many people say that the Guy West Bridge resembles the Golden Gate Bridge due to its golden color and identical towers. But of course the Golden Gate is a lot bigger and longer.
- While the Guy West is 600 feet long the Golden Gate is 8,000 feet long.
- The width of the Guy West is about 10 feet wide and the Golden Gate width is 90 feet wide.
- The twin towers on the Guy West stands 70 feet tall while the Golden Gate towers stands 700 feet tall above water and 500 feet tall above the roadway.
- In our math trail, we decided to focus on the proportions of the two bridges, trying to find the proportion
 - It was a bit difficult, because the proportion varied, depending on which part of the bridge we concentrated on.

Comparisons

	Guy West Bridge	Golden Gate Bridge
Length	600 Feet	8,000 Feet
Width	10 Feet	90 Feet
Height of Tower	70 Feet	700 Feet(above roadway)

People Walking on the Bridge

Description:

This experiment consists of the amount of people walking on the Guy West Bridge within a 20 minute period. The experiment was conducted during the afternoon of three days. For the experiment, the amount of females that were walking on the Guy West Bridge was counted, as well as the amount of males.

Analysis:

On the first day of the experiment, there were more females walking on the bridge than there were males. On the second and third days of the experiment, there was a significant drop in the amount of females walking on the bridge compared to males.

Cont. data

<i>20 minutes</i>	Monday (4/6/2009)	Wednesday (4/8/2009)	Monday (4/13/2009)	TOTAL	AVERAGE
Number of males	39	40	58	137	45.666667
Number of females	45	23	26	94	31.333333
TOTAL	84	63	84	231	77
AVERAGE	42	31.5	42	115.5	38.5

People Riding Bikes on the Bridge

Description: This experiment is very similar to the experiment of people walking on the Guy West Bridge. Instead, the number of people riding bikes is counted. This experiment was also done during a 20 minute period for three days, and was divided among females and males.

Analysis: Compared to the experiment of people walking on the bridge, there was a significant difference in the amount of people. The number of people riding bikes on the bridge was greatly smaller than the amount of people walking. The amount of females riding bikes on the bridge compared to the amount of males riding bikes was very significant. Not many females ride bikes on the bridge compared to males.

Cont. data

20 minutes	Monday (4/6/2009)	Wednesday (4/8/2009)	Monday (4/13/2009)	TOTAL	AVERAGE
Number of males	32	12	51	95	31.666667
Number of females	12	1	12	25	8.3333333
TOTAL	44	13	63	120	40
AVERAGE	22	6.5	31.5	60	20

Waving To Strangers on the Bridge

Description: For this experiment, we wanted to find the probability of people that respond to a greeting while crossing the Guy West Bridge. To conduct this, we waved at a random bystander and recording whether he/she responds to your greeting.

Analysis: We found out that males from the age of 18-25 responded more than any of the other categories. The least respondent were females in the ages of 25 and older. Although we had both a male and female greeting, there were no huge differences in the findings. Overall, we concluded that males turn out to be more generous than females.

Cont. data

	Monday (4/6/09)		Wednesday (4/8/09)		Monday (4/13/09)	
Response	YES	NO	YES	NO	YES	NO
Female (18-25)	12	8	10	3	13	11
Females (25 +)	3	0	0	1	2	0
Males (18-25)	14	13	15	3	23	23
Males (25+)	7	0	13	3	1	1
TOTAL	57		48		74	

What's left to be found:

- What is the exact proportion of the two bridges, if one exists?
- What is the volume of the twin towers?
- Is the suspension span a parabola or a catenary?
- How tall is the lamp post on the Guy West Bridge?