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| **Design Brief**  |
| Client Company: | Dennis H. Mahan |
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| Designers: | Brynae Waters  |
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| Problem Statement: | We have to create a bridge that meets all of the possible constraints. This includes operational environment, design criteria, and internal and external load handling. Bridge designing helps engineers make structural designs which are used. |
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| Design Statement: | The bridge can have as many amount of parts it wants to.  |
|  | It also has to be 225 kilometers  |
|  | 10 meters wide bridge deck  |
|  | 23 centimeters deck thickness |
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| Constraints: | Has to be under the maximum limit of 400,000 dollars |
|  | The bridge may cross the valley at any elevation from high water level to 24 meters above high water level  |
|  | May not exceed an elevation of 32.5 meters above high water |
|  | The bridge needs to have simple supports and arch supports  |
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