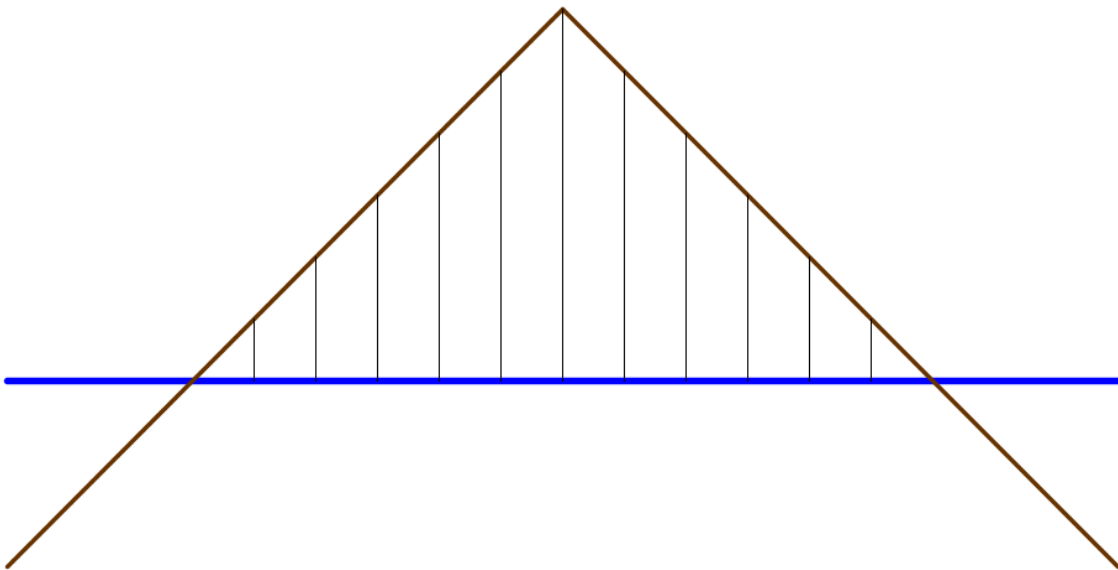


Building Bridges Answer

This activity is all about interpreting the information given.

There is a good chance that students will get the wrong idea of what the bridge looks like. One of the cards helps give the correct idea. Students should be encouraged to rethink their interpretation if it seems to be going nowhere.

Here is a side view of the bridge:



Since the beams meet at 90° , we have a lot of 45° angles which make the cable lengths simple to find (they are the same as horizontal distances).

Cable needed for one side: $10 + 20 + 30 + 40 + 50 + 60 + 50 + 40 + 30 + 20 + 10 = 360m$

Total cable needed = $720m$