**Assignment 4 Problem 3**

W=12 and thetha=30.(bridge will collapse)

When the load on the bridge of the truck is w=12 tons the values of forces F1 and f4 becomes -12tons.And the compression limit of the bridge is 10tons. So, when the w=12 and thetha= 30 the force values goes beyond the compression strength of the bridge. So, the bridge will collapse.

W=12 and thetha=45.(bridge wont collapse)

When the load on the bridge of the truck is w=12 tons and the angle thetha is increased to 45 from 30, all the forces are beyond the compression strength(10) and the tension strength(15) of the beams of bridge. So when we increase the angle to 45 the bridge will not collapse.