

Math 2215 - Calculus 1

Homework #7 - 2005.11.16

Due Date - 2005.11.28

Two towns, located on the same side of a straight river agree to construct a pumping station and filtering plant at the river's edge, to be used jointly to supply the towns with water. The distances of the two towns from the river are a and b and the distance between them is c . Show that the sum of the lengths of the pipe lines joining them to the pumping station is at least as great as $\sqrt{c^2 + 4ab}$.

