A rectangular plate 5.00 ft wide and 2.50 ft long is submerged in fresh water in an inclined position with both its upper and lower edges horizontal. The 5.00-ft dimension is measured along the incline. The vertical distances from the free surface of the liquid to the upper and lower edges are, respectively, 4.60 ft and 8.80 ft. The magnitude of the resultant force on one side of the plate is

A. 10,450 lb.
B. 6870 lb.

C. 5230 lb.
D. 3590 lb.

Wh...