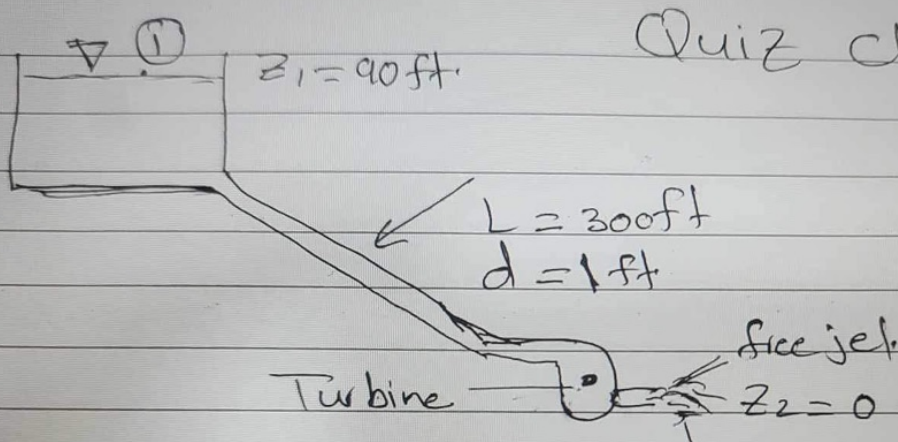
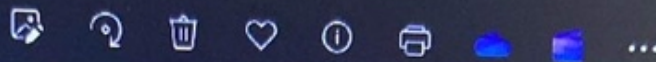




The Turbine in the system above extracts 50 hp from the water flowing between points 1 & 2. If the friction factor is estimated to be 0.02, & the minor losses are negligible. Find the flow rate ~~of~~ through the turbine.



BIRZEIT UNIVERSITY
Faculty of Engineering
Department of Mechanical Engineering

Fluid Mechanics First Quiz

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Problem 1 (10 points) :

The brake horsepower bhp of a pump is a function of the pump diameter, the density of the fluid, and the rotational speed of the impellers.

Express this relation as a dimensionless group and name the coefficient.

38%

