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PY 211

Discussion Section E9

11 April 2020

Quiz #8

1-

$P = F * A$

$(F\_1)*(A\_1) = (F\_2) * (A\_2)$

$(F\_1)=((A\_2)/(A\_1))* F\_2$

B

2-

$(A)(v\_1) = 4A(v\_2)$

$((A)(v\_1))/4A = (v\_2)$

$.25(v\_1) = (v\_2)$

$P\_1 + .5(rho)(v)^2 + (rho)(g)(y) = P\_2 + .5(rho)(.25v)^2 + (rho)(g)(2y)$

$P\_1= P\_2 + (rho)(g)(y) + .5(rho)(v)^2((1/16)-1)$

$P\_1 – P\_2 = (rho)(g)(y) - .46875(rho)v^2$

Change in pressure = (rho)(g)(y) - .46875(rho)v^2