Forces acting on part of fluid ABC of Ex. Prob. 3.11  $R_{AB}$  is the reaction of hydrostatic force  $F_{AB}$  acting on gate AB 1 m F<sub>BC</sub>=78.5 kN R<sub>AB</sub>=146.9 kN 0.957 m  $R_{AB}^{V} = F_{BC}^{V} + W_{ABC}^{V} = 109.3 \text{ kN}$ acts at point H 2 m **48**0 1.067 m  $W_{ABC}$ =30.8 kN Н  $F_{AC} = 98.1 \text{ kN}$  $F_{AB} = -\overline{R}_{AB}$  is the  $R^{H}_{\Delta B} = F_{\Delta C} = 98.1 \text{ kN}$ 0.849 m gate force acting at point H Copyright S.A. Kinnas, 2012 2/28/2012