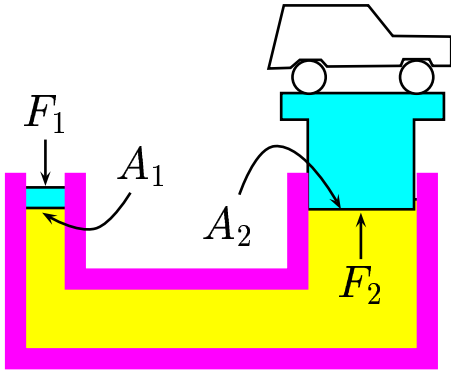


Consider the hydraulic lift shown in the sketch. A force  $F_1$  is applied to the small piston which gives rise to a force  $F_2$  at the large piston. The cross section areas of the two pistons are  $A_1$  and  $A_2$  respectively where  $\frac{A_1}{A_2} = 100$ .



Compare the pressures  $P_1 = \frac{F_1}{A_1}$  and  $P_2 = \frac{F_2}{A_2}$ .

- A)  $P_1 < P_2$ .
- B)  $P_1 = P_2$ .
- C)  $P_1 > P_2$ .

According to Pascal's law  $P_1 = P_2$ .

Answer **B**

15.02-03 A Hydraulic Lift 2007-4-26