

Experiment-Hydraulic Lift

- 1 Two syringes
- 2 Pipe
- 3 Glue
- 4 Glass
- 5 Two Flip Chart
- 6 Two Poles
- 7 Two small Iron

Calculation

$$\begin{aligned}F_1 &= 400g(+F_s) & F_2 &= 300g \\F_s &= 200g \\F_1' &= (400-200) \\F_1' &= 200g\end{aligned}$$

Finding Area

$V_1 = 4.7\text{cm}^3$	$V_2 = 4.7\text{cm}^3$
$H_1 = 4.5\text{cm}$	$H_2 = 2\text{cm}$
$V = AH$	$V = AH$
$A = V/H$	$A = V/H$
$A_1 = 4.7/4.5$	$A_2 = 4.7/2$
$A_1 = 1.04\text{cm}^2$	$A_2 = 2\text{cm}^2$

$$F_2/F_1' = A_2/A_1$$

$$\begin{aligned}300/200 &= 2/1.04 \\1.5 &= 2 \\2 &= 2\end{aligned}$$