

1.48 $p = \frac{F}{A}$

$\frac{18,000}{\left(\frac{2.5}{2}\right)^2 \pi} = 3,666.92 \text{ psi}$

1.58 $\frac{-\Delta p}{0.01} = 12(5.1) \cdot 10^{-10} \text{ Pa} = \frac{-\Delta p}{0.01} \frac{5.1 \cdot 10^{-12} \text{ Pascals}}{68 \text{ ees}} \quad \Delta p = 0.01 \left(\frac{1}{2.5 \cdot 10^9 \text{ Pa}} \right)$

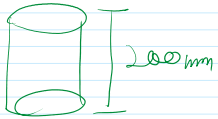
1.63 $S = \frac{F}{A \Delta L}$ $F = \Delta p \cdot \text{Area of piston}$ $\pi r^2 = 0.196$
 force \uparrow ΔL \uparrow ΔL
 884 Pound/inch

$884 = \frac{0.146}{A \cdot P} = 189,428 \text{ psi}$
 $884 = \frac{L}{W}$

1.76 1 force pound
 $\frac{1}{32.2} \text{ pounds}, 0.453 \text{ Kg}, 4.94 \text{ N}, 0.037 \text{ s lues}$

$p = \frac{F}{A}$ $F = 966,469 = F$
 pounds

1.92 150 mm $35.4 - 2.25 = 53.1 \text{ s N} / 9.8 \text{ m/s}^2 = 3.382 \text{ Kg} = 3382.65 \text{ g}$



$V = \pi (75 \text{ m})^2 (200) = 3,534,241 \text{ mm}^3$

$\frac{3382.65}{3,534,241} = 0.000957$

1.167
 0.79 g/cm³
 1.532 slug/ft³

$-\frac{-p}{\Delta V \cdot L} = \frac{-pV}{\Delta V}$
 $\Delta V B = -pV$
 $-\frac{\Delta V B}{V} = p$