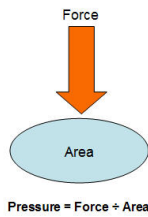


Pressure

Force & Pressure

Objective:

Define & calculate pressure and distinguish from force.



Force & Pressure

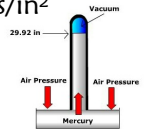
Pressure measures how much force is distributed over a certain area.

Area = $l \cdot w$

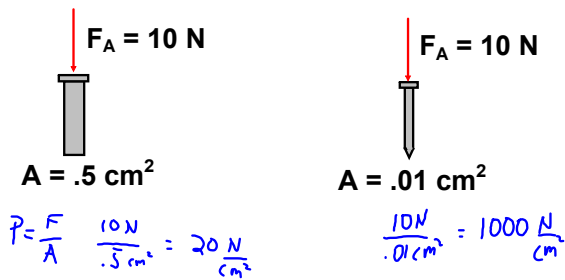
$$P = \frac{F}{A} \quad \frac{N}{m^2} \quad \frac{N}{cm^2} \quad \frac{N}{mm^2}$$

Units: N/m^2 or Pascal (Pa), psi - lbs/in^2

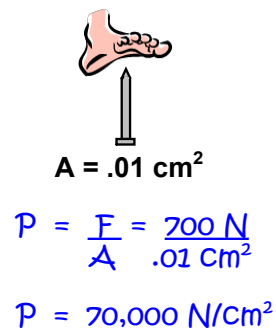
Ex. water pressure, air pressure



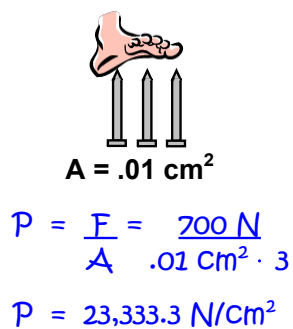
Pressure Examples



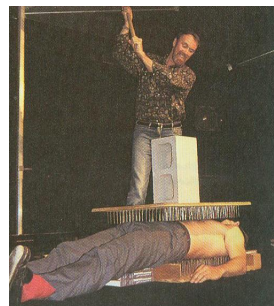
Pressure Example



Pressure Example

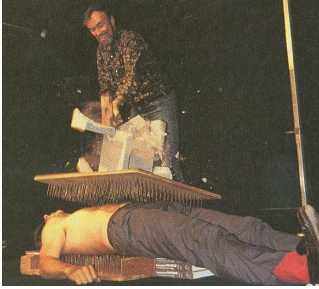


Bed of Nails

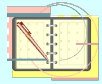


Pressure

Bed of Nails



Assignments . . .



- Chapter 4 HW #22-24

