{Question #1}

g=9.81[m/s^2]
A=0.01[m^2]
m=50[kg]
P_atm=1[bar]

P=P_atm+((m*g)/A)***convert**(Pa, bar) {Pressure: P = 1.491 bar}

SOLUTION
Unit Settings: SI C kPa kJ mass deg

$A = 0.01$ [m^2] $g = 9.81$ [m/s^2] $m = 50$ [kg]
$P = 1.491$ [bar] $P_{atm} = 1$ [bar]

No unit problems were detected.