$$PV = nRT, \tag{1}$$

where

P - pressure,

V - volume,

n - number of moles,

R - ideal gas constant,

T - temperature.

Make sure to check which variables are held constant and which ones are changing.

$$P = \frac{F}{A}, \tag{2}$$

where

F - force,

A - area to which the force is applied.

$$R = kN_A, \tag{3}$$

where

k - Bolzmann constant,

N_A - N Avogadro.

$$m = nM, \tag{4}$$

where

m - mass of the gas,

M - molar mass of the gas.