Answer on Question #85345 – Chemistry – General Chemistry

The pressure of a gas of 200 cm³ volume is reduced to half of it's volume, calculate the volume.

Solution:

$V_1 = 200 \text{ cm}^3 = 200 \text{ mL} = 0.2 \text{ L}$

$P_2 = 1/2 \times P_1$

$V_2 = ?$

$P_1 V_1 = P_2 V_2$

$V_2 = P_1 V_1 / P_2 = P_1 \times 0.2 \text{ L} / (1/2 \times P_1) = 0.4 \text{ L}$