Answer on Question #83482, Physics / Molecular Physics | Thermodynamics

Question:

What change in pressure occurs in a party balloon that is squeezed to one third its volume with no change in temperature?

Solution:

In accordance with Boyle-Marriott law $p_1V_1 = p_2V_2$, respectively $p_2 = p_1\dfrac{V_1}{V_2} = 3p_1$, i.e. the pressure will increase in three times.

The answer:

The pressure will increase in three times.