

1.8.8.1: Practice Dalton's Law

Exercise 1.8.8.1.1

You have a tank with a mixture of nitrogen and oxygen gas. The total pressure of the tank is 2550 psi. If the pressure of nitrogen is 1270 psi, what is the pressure of the oxygen?

Answer

1280 psi.

Exercise 1.8.8.1.1

A sample of hydrogen gas is collected over water in a flask that has the same pressure as the lab room (0.9865 atm that day). The flask of water is 22.0 °C, and at that temperature, water vapor pressure is 19.8 mm Hg. What is the pressure of the hydrogen gas collected? If it occupies a volume of 445 mL, how many moles of hydrogen gas are there? (Assume the temperature of the hydrogen gas is also 22.0 °C)

Answer

Pressure = 0.9604 atm (or 729.9 mm Hg). There are 0.0177 moles.

1.8.8.1: Practice Dalton's Law is shared under a [not declared](#) license and was authored, remixed, and/or curated by LibreTexts.