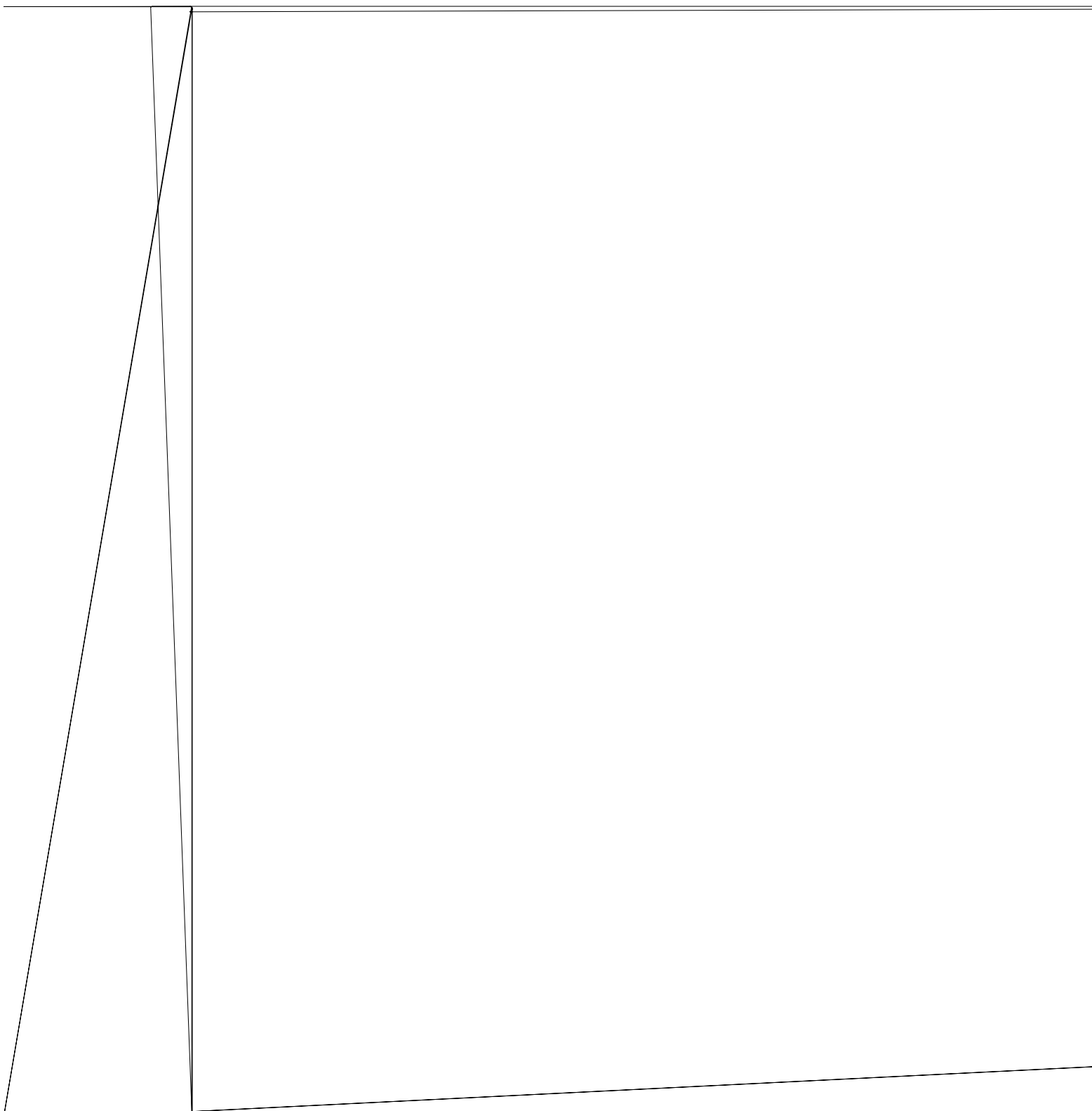
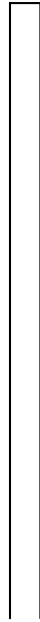




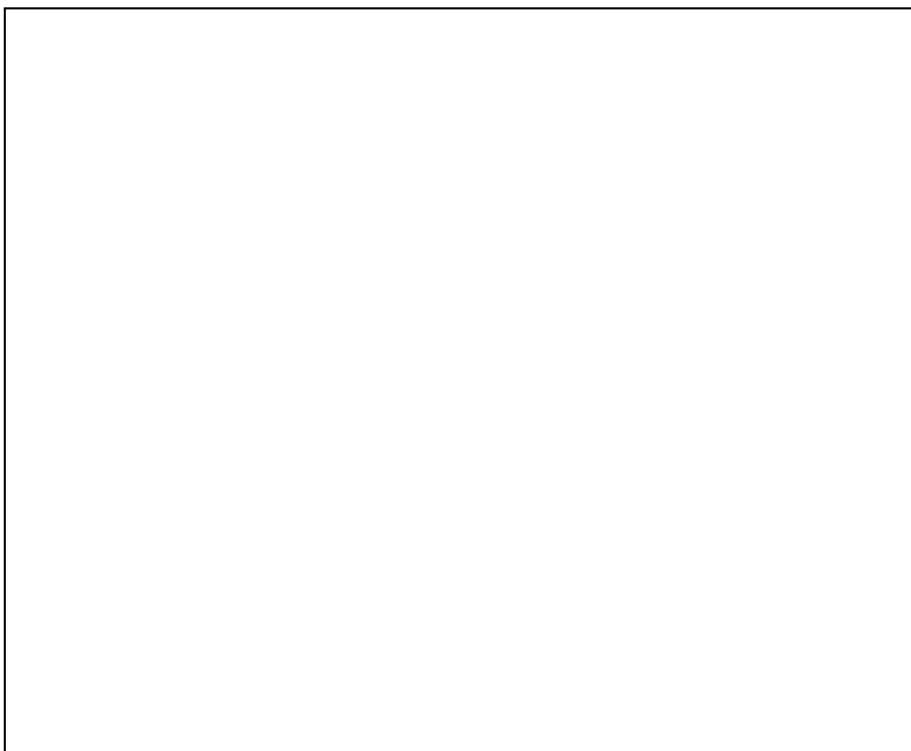


Pressure Units

Manometers

- Pressures of gas samples are routinely measured with a

I



Boyle's Law

- L For a fixed amount of gas at constant temperature, volume is inversely proportional to pressure.

$$V \propto 1/P$$

$$V = b/P \quad VP = b \quad b = f($$

$V\%$ —

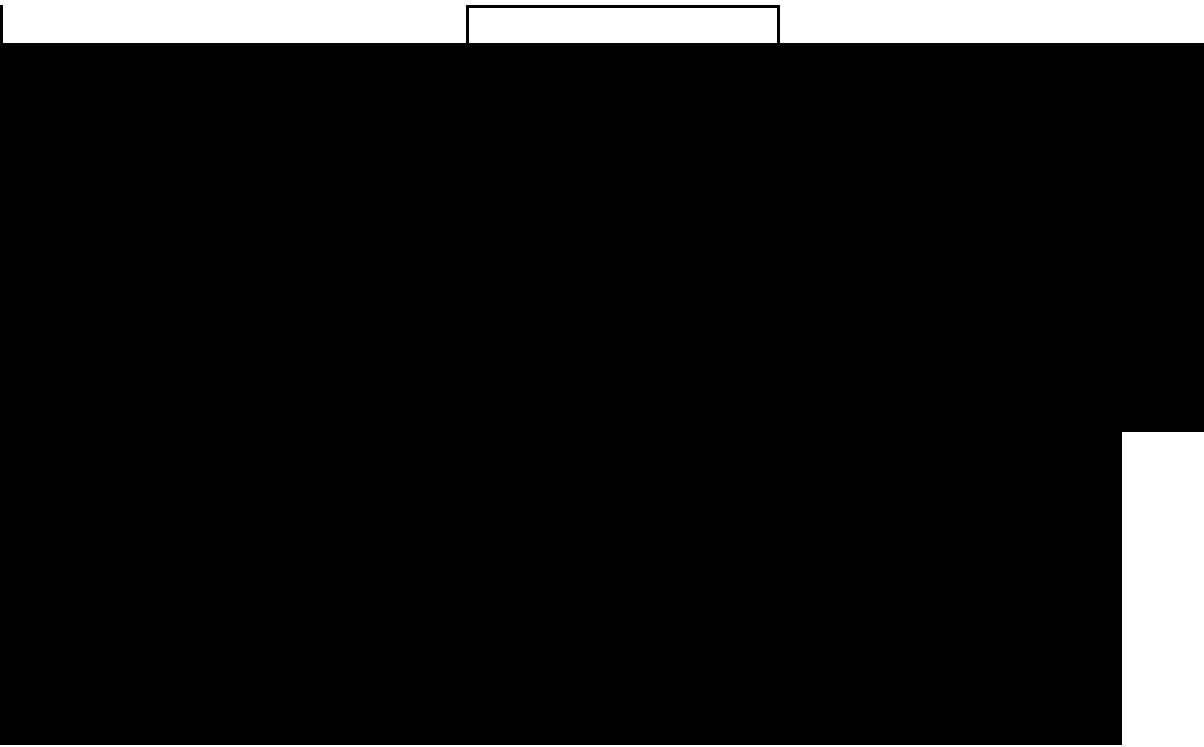
Combined Gas Law Equation to

Ideal Gas Law

$$PV = nRT$$

$$R = 0.08206 \text{ L}\cdot\text{atm}/\text{K}\cdot\text{mol}$$

R the gas law constant



PV'

Gay-Lussac's Law of Combining Gas Volumes

$V' \cdot n$

called



Gas Law Summary

$$PV = nRT$$

Boyle:

$$PV = nRT$$

V, P variable

n, T constant

$$P_1V_1 = P_2V_2$$

Charles:

$$PV = nRT$$

V, T variable

n, P constant

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