

### Answers to Selected Worksheet Questions

#### BOYLE'S LAW AND CHARLES' LAW WORKSHEET

- 2.60 L
- 33.1 mL
- .603 atm
- 3040 L
- 67.7 mL
- 29.0 mL
- 30.0°C

#### IDEAL GAS LAW WORKSHEET

- .769 moles
- .769 moles – type of gas does not matter if problem does not have g, mass, density or molar mass
- 1.34 g
- .976 g
- 1.19 L
- see each part
  - 2.51 mol
  100. g
- 446 K or 173°C
- See Gas Review Notes
- See Gas Review Notes
- a. 2 mole and 44.8 L
- moles to grams, and then  $PV=nRT$
- $n = PV/(RT)$
- $P = nRT/V$
- mole fractions are .2, .4, .4. Partial Pressures are 18 kPa, 36 kPa, and 36 kPa

#### Gases Review Worksheet (Selected Answers Only)

Show all work on a separate sheet stapled behind this one.

- 1.42 g/L
- 1.03 g/L

- 31.2 L/mol
- 2.23 mol

#### Gases Pre-Exam Worksheet

Show all work, even on multiple choice questions.

- (B) 16 g of oxygen
- (C) the molar mass is 89.6 g·mol<sup>-1</sup>
- (e) 1 L of CO<sub>2</sub> at STP.
- (B) SO<sub>2</sub>
- 444 mm Hg
- (A)  $950 \text{ mL} \times \frac{720 \text{ mmHg}}{760 \text{ mmHg}}$
- $\frac{1.69 \text{ g}}{\text{_____}}$
- (A) 1.25 atm