Worksheet on Pressure conversions, Manometers & Boyle's Law Name: \_\_\_\_\_\_\_\_\_\_\_ \_\_

Due next class

**Calculate the following pressure conversions. (You do not need to show your work!) (4)**

1. 111.8 kPa = \_\_\_\_\_\_\_\_ mm Hg 3. 780 mm Hg = \_\_\_\_\_\_\_ atm

2. 1.23 atm = \_\_\_\_\_\_\_\_ kPa 4. 685 mm Hg = \_\_\_\_\_\_\_ kPa

**What is the pressure exerted by the gas sample for the following closed-end manometers.** (You do not need to show your work!) (2)



5. \_\_\_\_\_\_\_\_\_\_\_\_ kPa

6. \_\_\_\_\_\_\_\_\_\_\_\_ kPa

**What is the pressure exerted by the gas sample for the following open-end manometers. (Show your work below)(4)**

6. \_\_\_\_\_\_\_\_\_\_\_\_\_ atm 7. \_\_\_\_\_\_\_\_\_\_\_\_ atm

**8. A gas occupies a volume of 78.4 L under a pressure of 1.08 atm and 15˚C. What volume will it occupy if the pressure is doubled without changing the temperature? (Show your work below)(2)**

**9. A gas that occupies a volume of 1.53 L exerts a pressure of 99.3 kPa . What pressure is required to compress the volume to 0.33 L? Assume that the temperature remains constant. (Show your work below)(2)**

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