**Honors Chemistry – KMT and Gas Laws Review Sheet**

1. What is the main idea behind the kinetic molecular theory? (3 pt)
2. Which of the underlying assumptions about the behavior of gas molecules (I’ve been referring to these as “postulates”) of the KMT do you believe is most accurate? Explain your answer. (4 pt)
3. What is the volume of an ideal gas when the temperature is 0 K? Is this possible? Explain your answer. (4 pt)
4. I’ve got a gas that has a pressure of 4.5 x 10-3 atm. at a temperature of 3500 K. If I were to heat this gas by 250 K, what would the new pressure of this gas be? (4 pt)
5. What real world gas do you believe most closely approximates an ideal gas? Explain your reasons for believing this. (3 pt)
6. For some reason, I have 0.15 moles of an ideal gas in a 57.5 L container at a temperature of 750 K. Given that R = 0.08206 Latm/mol K, what is the pressure inside of this container? (5 pt)
7. Let’s define some terms! (2 pt each)

* ideal gas:
* pressure:
* combined gas law (just write the equation):