

NAME:

STUDENT ID:

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**Problem**

- a. (True or False) If the compressibility factor ( $Z$ ) is less than 1, the fluid is not considered an ideal gas.
  
- b. (True or False) For ideal gases,  $h = u + RT$ .
  
- c. When a rigid tank is heated, boundary work is:  
(i) positive                      (ii) negative                      (iii) zero
  
- d. Specific volume is:  
(i) an intensive property      (ii) an extensive property      (iii) not a property
  
- e. What are the three mechanisms of energy transfer to and from a system?