Assignment 3

Due on 2020-05-15, 23:59 (UTC)

1. Which of the following properties are necessary to consider the thermodynamic properties of a fluid in a liquid-equivalent thermos? (Select one option, you could be right.)

- Point A: Internal energy per unit mass
- Point B: Pressure
- Point C: Enthalpy
- Point D: All of the above

2. Point A: Internal energy per unit mass

- Point B: Pressure
- Point C: Enthalpy
- Point D: All of the above

3. Point A: Internal energy per unit mass

- Point B: Pressure
- Point C: Enthalpy
- Point D: All of the above

4. Point A: Internal energy per unit mass

- Point B: Pressure
- Point C: Enthalpy
- Point D: All of the above

5. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)

6. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)

7. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)

8. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)

9. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)

10. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)

11. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)

12. Consider the case of an ideal gas. The equations of state for different gases are: (i) , (ii) , (iii) , (iv) , where and are the temperature and pressure, respectively. Which of the following statements is true?

- Point A: All of the above

- Point B: Only (i) and (ii)

- Point C: Only (i) and (iii)

- Point D: Only (ii) and (iv)