Assignment 6

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1) Given that for ethane $P_c = 48.8 \text{ bar}, T_c = 305.3 \text{ K}, \omega = 0.099$. Use Peng-Robinson Equation of state and calculate the residual enthalpy of ethane at 300 K and 25 bar. The value in $J \text{ mol}^{-1}$, correct to the nearest integer is ____________

No, the answer is incorrect.
Score: 0
Accepted Answers: (Type: Range) -1800,-1600

10 points

2) Given that for ethane $P_c = 48.8 \text{ bar}, T_c = 305.3 \text{ K}, \omega = 0.099$. Use Lee/Kesler and calculate the residual entropy for ethane at 290.23 K and 29.28 bar. Its value in $J \text{ mol}^{-1} \text{ K}^{-1}$, correct to one digit after the decimal is ____________

No, the answer is incorrect.
Score: 0
Accepted Answers: (Type: Range) -7,-3

8 points

3) Given that for ammonia $P_c = 112.8 \text{ bar}, T_c = 405.7 \text{ K}, Z_c = 0.242, \omega = 0.253$. At 293.15 K the molar volume of saturated liquid ammonia in $cm^3 \text{ mol}^{-1}$, correct nearest integer is ____________

No, the answer is incorrect.
Score: 0
Accepted Answers: (Type: Range) 26,28

7 points