

Critical Question #8

Note that $0\text{ }^{\circ}\text{C} = +273\text{ K}$ and $R = 0.08206\text{ L atm mol}^{-1}\text{ K}^{-1}$

Name _____

Calculate the pressure of 4.50 mol of an ideal gas which is contained in a 7.0 L volume at 200°C .

ANS: _____ atm

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Note that $0\text{ }^{\circ}\text{C} = +273\text{ K}$ and $R = 0.08206\text{ L atm mol}^{-1}\text{ K}^{-1}$

Name _____

Calculate the container volume if 3.00 mol of an ideal gas which is constrained with 6.0 atm pressure at $300\text{ }^{\circ}\text{C}$.

ANS: _____ L

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Name _____

Calculate the temperature of 3.00 mol of an ideal gas which is contained in a 5.0 L volume at a pressure of 15.0 atm. Show the temperature unit of your answer

ANS: _____ unit !

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Name _____

How many moles of an ideal gas which is contained in a 5.0 L volume at 270°C would generate 2.0 atm of pressure?

ANS: _____ mol

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Name _____

Calculate the pressure of 2.50 mol of an ideal gas which is contained in a 17.0 L volume at $200\text{ }^{\circ}\text{C}$.

ANS: _____ atm

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Name _____

Calculate the container volume if 5.00 mol of an ideal gas which is constrained with 60.0 atm pressure at 300°C .

ANS: _____ L

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Name _____

Calculate the temperature of 4.00 mol of an ideal gas which is contained in a 5.0 L volume at a pressure of 25.0 atm. Show the temperature unit of your answer

ANS: _____ unit !

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Name _____

How many moles of an ideal gas which is contained in a 5.0 L volume at 250°C would generate 2.0 atm of pressure?

ANS: _____ mol