Answers to practice problems D in page 431

Answers to Practice Problems D
1. 1.29 atm
2. 325 K, or 52°C
3. 491 K, or 218°C
4. 32.6 psi

Homework —— GENERAL

Additional Practice

1. The pressure in a tire is 101 kPa at 10.0°C, what will be the pressure of the tire at 45.0°C? (Hint: the volume remains constant.)
Ans. 113 kPa

2. The pressure in a bottle of soda pop is 505 kPa at 20.0°C. What is the new pressure if someone warms the sealed bottle to 65.0°C? Ans. 583 kPa

3. If a gas at 600°C exerts a pressure of 1515 kPa, at what temperature (in degrees Celsius) will the gas exert 151.5 kPa of pressure if the volume remains constant? Ans. –186°C

LS Logical