Question #: 78014
D is equal to the ideal gas constant.

A. R = 8.315 (Pa × m3) / (mole × K)
B. R = 8.315 J / (mole × K)
C. R = 0.0821 (L × atm) / (mole × K)
D. All of the Above
E. None of the Above

Solution:

$$R = 8{,}315 \frac{J}{mole \ x \ K} = 0{,}0821 \frac{l \ x \ atm}{mole \ x \ K};$$

$$\frac{Pa \ x \ m^3}{mole \ x \ K} = \frac{H/m^2 \ x \ m^3}{mole \ x \ K} = \frac{H \ x \ m}{mole \ x \ K} = \frac{J}{mole \ x \ K}$$

Answer: D