Answers to problems 1, 2 in page 311

Answers to Practice Problems D

1. 2.89×10^{24} molecules BrF₅

2. 2.22×10^{19} molecules Br₂

Homework

GENERAL

Additional Practice

1. If 2.46 × 10²⁵ molecules of chlorine react completely, how many grams of NaCl will form?

$$2Na(s) + Cl_2(g) \rightarrow 2NaCl(s)$$

Ans. 4.77×10^3 g NaCl

2. How many molecules of carbon dioxide are produced when 79.5 g of K₂CO₃ decompose?

$$K_2CO_3(s) \rightarrow K_2O(s) + CO_2(g)$$

Ans. 3.46×10^{23} molecules CO₂

3. How many water molecules form from the complete combustion of 1.129 × 10²⁴ molecules C₄H₁₀?

$$2C_4H_{10}(g) + 13O_2(g) \rightarrow 8CO_2(g) + 10H_2O(l)$$

Ans. 5.645×10^{24} molecules H₂O

Logical