

Warm Up

How many moles are in 2.14×10^{24} molecules of NO_2 ?

$$2.14 \times 10^{24} \text{ molecules NO}_2 \times \frac{1 \text{ mol NO}_2}{6.02 \times 10^{23} \text{ molecules NO}_2} =$$

$$3.55 \text{ mol NO}_2$$

How many atoms are in 8.08 moles of C_3H_8 ?

$$8.08 \text{ mol C}_3\text{H}_8 \times \frac{6.02 \times 10^{23} \text{ molecules C}_3\text{H}_8}{1 \text{ mol C}_3\text{H}_8} \times \frac{11 \text{ atoms}}{1 \text{ molecules C}_3\text{H}_8}$$

$$5.35 \times 10^{25} \text{ atoms}$$

#3-6 p. 291-292

③ 4.65 mol Si

④ 0.360 mol Br₂

⑤ 2.75×10^{24} atoms

⑥ 7.72 mol NO₂

Homework

Worksheet - Molar Calculations

$$1 \text{ dozen} = 12$$

$$1 \text{ mol} = 6.02 \times 10^{23} \text{ rep particles}$$

$$1 \text{ mol C} = 6.02 \times 10^{23} \text{ atoms C}$$

$$1 \text{ mol CO}_2 = 6.02 \times 10^{23} \text{ molecules CO}_2$$