

## Chemical Calculations

Writing and Using Mole Ratios

Mole - Mole Calculations

Example: p. 360 # 12

⑨ ? moles  $O_2$  = 14.8 moles Al

(12)  
a

$$\frac{? \text{ mole } O_2}{3 \text{ mole } O_2} = \frac{14.8 \text{ mole Al}}{4 \text{ mole Al}}$$

$$? \text{ mole } O_2 = 11.1 \text{ mole}$$

Sep 25-9:16 AM

Feb 7-8:23 AM

(12)  
b

$$\frac{? \text{ mole } Al_2O_3}{2 \text{ mole } Al_2O_3} = \frac{.78 \text{ mole } O_2}{3 \text{ mole } O_2}$$

$$? \text{ mole } Al_2O_3 = .52 \text{ mole}$$

## Chemical Calculations

Writing and Using Mole Ratios

Mass - Mole Calculations

Example: p. 361 # 14

(14)

$$? \text{ mole } CaC_2 = 49 \text{ g } H_2O$$

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(14)



$$\frac{49 \text{ g } H_2O}{18 \text{ g } H_2O} \times \frac{1 \text{ mole } H_2O}{2 \text{ mole } CaC_2} = 1.36 \text{ mole } CaC_2$$

## Chemical Calculations

Writing and Using Mole Ratios with other Stoichiometric Calculations

Mass - Molecules Calculations

Example: p. 364 # 15

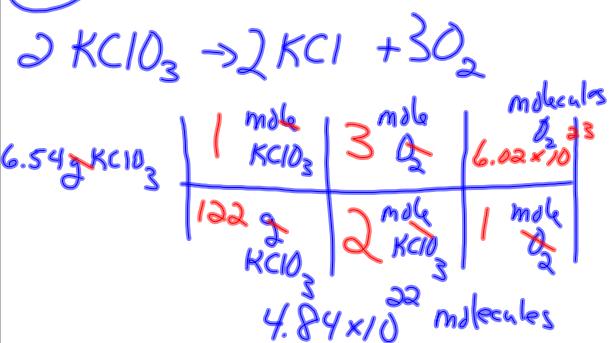
(15)

$$? \text{ molecules } O_2 = 6.54 \text{ g } KClO_3$$

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(15)



Chemical Calculations

Writing and Using Mole Ratios with other Stoichiometric Calculations

Volume - Volume Calculations

Example: p. 365 # 17

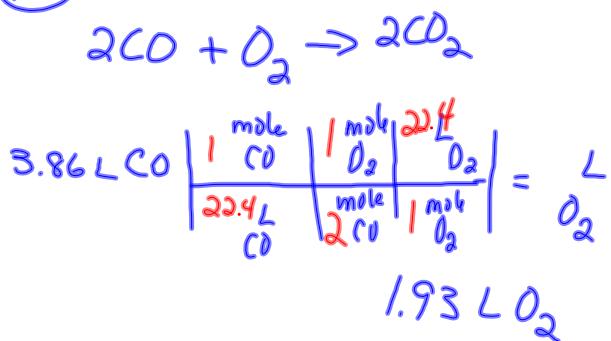
(17)

$$? \text{ L O}_2 = 3.86 \text{ L CO}$$

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(17)



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Feb 7-12:15 PM