

Assessment

Chemistry: Lesson 13



Question 1



the molar masses: $\text{C}_3\text{H}_8 = 44.0$, $\text{O}_2 = 32.0$, $\text{CO}_2 = 44.0$, $\text{H}_2\text{O} = 18.0$

10 mol O_2 with an excess of C_3H_8 should produce _____ mol CO_2 .

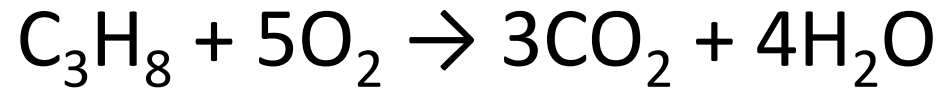
A. 3

B. 4

C. 5

D. 6

Question 2

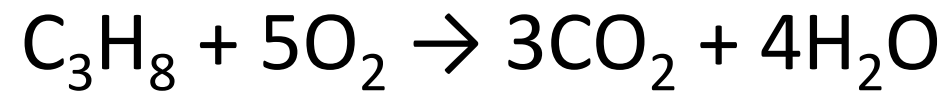


the molar masses: $\text{C}_3\text{H}_8 = 44.0$, $\text{O}_2 = 32.0$, $\text{CO}_2 = 44.0$, $\text{H}_2\text{O} = 18.0$

44.0 g C_3H_8 with an excess of O_2 yields _____ g CO_2 .

- A. 44.0
- B. 88.0
- C. 132
- D. 176

Question 3

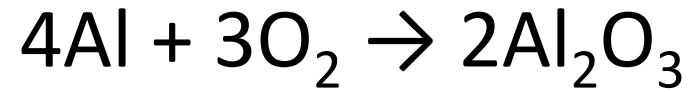


the molar masses: $\text{C}_3\text{H}_8 = 44.0$, $\text{O}_2 = 32.0$, $\text{CO}_2 = 44.0$, $\text{H}_2\text{O} = 18.0$

A yield of 66 g CO_2 should also yield _____ g H_2O .

- A. 18
- B. 36
- C. 54
- D. 72

Question 4

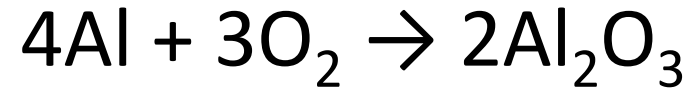


the molar masses: Al = 27.0, O₂ = 32.0, Al₂O₃ = 102.0

108 g Al needs _____ g O₂ without either one being a limiting reactant.

- A. 96.0
- B. 102.0
- C. 108.0
- D. 114.0

Question 5



the molar masses: $\text{Al} = 27.0$, $\text{O}_2 = 32.0$, $\text{Al}_2\text{O}_3 = 102.0$

54.0 g Al with an excess of O_2 yields _____ g Al_2O_3 .

- A. 102.0
- B. 204.0
- C. 76.5
- D. 51.0

Question 6

$4\text{Al} + 3\text{O}_2 \rightarrow 2\text{Al}_2\text{O}_3$ the molar masses:

$\text{Al} = 27.0$, $\text{O}_2 = 32.0$, $\text{Al}_2\text{O}_3 = 102.0$ To make 51.0 g Al_2O_3 , we need _____ g Al.

- A. 108.0
- B. 51.0
- C. 27.0
- D. 20.0

Stoichiometry is a comparison of quantities in reactions.

A. True

B. False

Question 9

Percent yield = (theoretical yield/actual yield) \times 100.

A. True

B. False

Question 10

Mass of a reactant : mass of a product cannot be compared without changing the masses to moles.

A. True

B. False