

Q1. For the reaction: $A + 2B \rightarrow C$

5 mole of A and 8 mole of B will produce :

- (1) 5 mole of C
- (2) 4 mole of C
- (3) 8 mole of C
- (4) 12 mole of C

Q2. For the reaction $2P + Q \rightarrow R$, 8 mol of P and 5 mol of Q will produce

- (1) 8 mol of R
- (2) 4 mol of R
- (3) 5 mol of R
- (4) 13 mol of R

Q3. The moles of O_2 required for reacting with 6.8 g of ammonia

(..... $NH_3 + .. O_2 \rightarrow ... NO + H_2O$) is

- (1) 5
- (2) 1
- (3) 2.5
- (4) 0.5

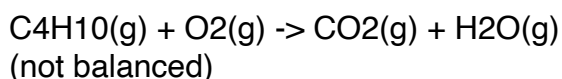
Q4. Calculate the weight of iron which will be converted into its oxide by the action of 18g of steam.

Unbalanced reaction:



Q5. Butane, C_4H_{10} , burns with the oxygen in air to give carbon dioxide and water.

What is the amount (in moles) of carbon dioxide produced from 0.15 mol C_4H_{10} ?

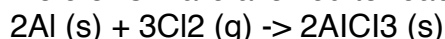


- 1. 0.15 mol CO_2
- 2. 0.30 mol CO_2
- 3. 0.45 mol CO_2
- 4. 0.60 mol CO_2

Q6. 4 g of hydrogen is ignited with 4 g of oxygen, the amount of water formed is?

- (1) 2.5 g
- (2) 0.5 g
- (3) 4.5 g
- (4) 8 g

Q7. A mixture of 1.0 mole of Al and 3.0 mole of Cl_2 are allowed to react as :



- (a) Which is limiting reagent?
- (b) How many moles of $AlCl_3$ are formed?
- (c) Moles of excess reagent left unreacted is...

- (1) (a) Al, (b) 1.0, (c) 1.5
- (2) (a) Cl_2 , (b) 2.0, (c) 2.0
- (3) (a) Al, (b) 0.5, (c) 1.5
- (4) (a) Cl_2 , (b) 1.0, (c) 1.5

Q8. 50 g of $CaCO_3$ is allowed to react with 73.5 g of H_3PO_4 . Calculate :

- (i) Amount of $Ca_3(PO_4)_2$ formed (in moles)
- (ii) Amount of unreacted reagent (in moles)