

Moles – practice 3

1 Determine the number of moles present in each of the following at room temperature and pressure:

(a) 0.24 dm³ of O₂

(b) 2 dm³ of CH₄

(c) 0.1 dm³ of SO₂

(d) 400 cm³ of N₂

(e) 250 cm³ of CO₂

2 Work out the volume of each of the following at room temperature and pressure:

(a) 0.1 mol C₃H₈

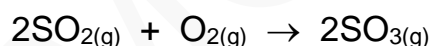
(b) 100 mol SO₃

(c) 0.27 mol N₂

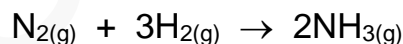
(d) 0.85 mol NH₃

(e) 0.60 mol O₂

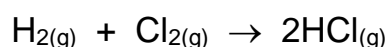
3 (a) What volume of SO₃ is formed when 2.5 dm³ of O₂ react with excess SO₂?



(b) What volume of hydrogen would be required to make 240 cm³ of NH₃?



(c) What volume of HCl is formed when 0.5 dm³ of H₂ reacts with excess Cl₂?



(d) What volume of CO₂ is formed when 0.6 dm³ of O₂ reacts with excess C₃H₈?

