

Question 26 (4 marks)

A gas is produced when 10.0 g of zinc is placed in 0.50 L of 0.20 mol L⁻¹ nitric acid.

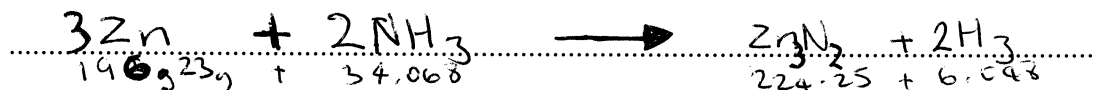
4

Calculate the volume of gas produced at 25°C and 100 kPa. Include a balanced chemical equation in your answer.

Zn valence = +2
N = -3

Zn = Zinc = 65.41g = 1 mole

NH₃ = Nitric acid = 17.034g = 1 mole



Zn = 10.0g = 0.153 moles

