What is the volume of 0.25 mol/dm^3 solution of KOH that would yield 6.5 g of solid KOH in evaporation.

C(solution) = 0.25 mol/dm^3 = 0.25 M

m(KOH) = 6.5 g

V(solution) - ?

1. n(KOH) = m(KOH)/ M(KOH) = 6.5 g/ 56 g/mol = 0.12 mol
2. V(solution) = n(KOH)/C(solution) = 0.12 mol/0.25 M = 0.48 dm^3 = 0.48 L