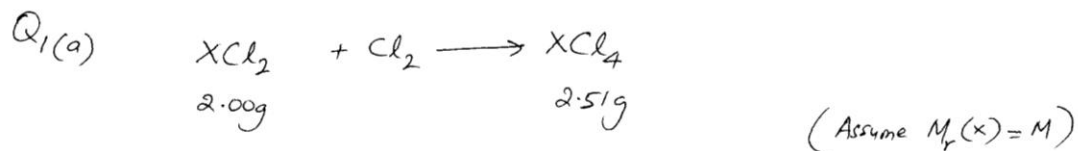


Sem 2 (2009/2010) : Stoichiometry



$$\frac{n_{XCl_2}}{n_{XCl_4}} = \frac{1}{1} \quad \therefore n_{XCl_2} = n_{XCl_4}$$

$$\left(\frac{2.00}{71+M} \right) = \left(\frac{2.51}{142+M} \right)$$

$$284 + 2M = 178.2 + 2.51M$$

$$M = 207.45 \text{ g mol}^{-1}$$

X is lead, Pb
It exist as Pb^{2+} ($PbCl_2$) and
as Pb^{4+} ($PbCl_4$).