$$Mass\%\ of\ element,\ X = \frac{Mass\ of\ element\ in\ the\ compound}{Mass\ of\ one\ molecule\ of\ the\ compound} \times 100$$

$$Mass\ of\ one\ molecule\ of\ Fe_2(SO_4)_3 = Molar\ mass\ of\ Fe_2(SO_4)_3$$

$$Molar\ mass\ of\ Fe_2(SO_4)_3 = 400\ g\ /\ mol$$

$$Mass\%\ of\ Fe = \frac{2\times 56}{400} \times 100 = 28\%$$

$$Mass\%\ of\ S = \frac{3\times 32}{400} \times 100 = 24\%$$

$$Mass\%\ of\ O = \frac{3\times 4\times 16}{400} \times 100 = 48\%$$