

Solutions

Each answer shows the steps, then the **result**.

2.1

- $0.15 \times 200 = 30 \text{ g}$

2.2

- A mixture has variable composition (or can be separated physically)

2.3

- $100 - 60 = 40\%$

2.4

- $n = m/M = 24/12 = 2 \text{ mol}$

3.1 B

- its composition can vary

3.2 B

- $10/40 \times 100 = 25\%$

3.3

(a)

- $0.65 \times 250 = 162.5 \text{ g}$

(b)

- $0.35 \times 250 = 87.5 \text{ g}$

3.4

(a)

- water = $18/18 = 1 \text{ mol}$; ethanol = $46/46 = 1 \text{ mol}$

(b)

- No — it is variable