

Solutions

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

2.1

- they are identical, so the charge splits equally: $\frac{8.0}{2} = 4.0 \mu\text{C}$ each

2.2

- their electric potential

2.3

- conservation of charge

3.1 B

3.2 B

3.3

(a)

- $\frac{12}{2} = 6.0 \mu\text{C}$ on each

(b)

- conservation of charge (with equal sharing between identical spheres)