

Solutions

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

2.1

- where waves overlap, the total displacement is the sum of the individual displacements

2.2

- they must be exactly out of phase (crest meets trough)

2.3

- a point on a standing wave that stays at rest (zero displacement)

3.1 B

3.2 B

3.3

(a)

- a larger wave (constructive interference)

(b)

- they cancel (destructive interference)

(c)

- the principle of superposition