

Solutions

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

2.1

- $3.0 \times 10^8 \text{ m s}^{-1}$

2.2

- electric and magnetic fields

2.3

- radio waves, then visible light, then X-rays

3.1 C

3.2 D

3.3

(a)

- $\lambda = \frac{c}{f} = \frac{3.0 \times 10^8}{1.0 \times 10^8} = 3.0 \text{ m}$

(b)

- shorter