

- 17 The diameter of the receiving dish of a telescope is 5.1 m. It receives light of wavelength  $0.40 \mu\text{m}$  from two point sources at a distance of  $2.8 \times 10^{25} \text{ m}$  away.

What is the minimum separation of the two points sources so that the light from them can be resolved?

- A  $1.1 \times 10^{18} \text{ m}$
- B  $2.2 \times 10^{18} \text{ m}$
- C  $1.8 \times 10^{32} \text{ m}$
- D  $3.6 \times 10^{32} \text{ m}$