

- 18** Two sources of radio waves are at a distance of  $1.0 \times 10^{15}$  m from Earth. The sources are separated by  $1.0 \times 10^{12}$  m and emit radio waves of wavelength 0.030 m.

What is the estimate for the diameter of a dish of a radio telescope on Earth that will just resolve the two sources?

- A**  $3.0 \times 10^{-5}$  m      **B**  $3.0 \times 10^{-4}$  m      **C** 0.03 m      **D** 30 m