

- 17** A double star system is at a distance of 20 light years from the Earth. A telescope with a diameter of 3.0 m is used to view the stars. What is the approximate minimum separation between the two stars of the double star system that can be detected by the telescope? (A light year is the distance light travels in a vacuum in one year.)

A 10^8 m

B 10^9 m

C 10^{10} m

D 10^{11} m

