11 A double star system is at a distance of 1.9×10^{17} m 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 such that both stars can be detected by the telescope?

A 5.0×10^{8} m **B** 1.0×10^{9} m **C** 3.0×10^{10} m **D** 3.0×10^{11} m