

Tornado alley



The severity of a tornado is measured on the Fujita scale.

The most destructive tornadoes are given a rating of F5.

A reporter who researches the occurrence of tornadoes in the USA's tornado alley states, "In the next 20 years the chance that an F5 tornado will occur in Kansas is two out of seven."

Which of the statements below best matches the meaning of the reporter's statement?

- A) $20 \times \frac{2}{7} = 5.7$ so between 5 and 6 years from now there will be an F5 tornado in Kansas
- B) The likelihood that there will be an F5 tornado at some time during the next 20 years is lower than the likelihood of no F5 tornado.
- C) $\frac{2}{7}$ is less than $\frac{1}{2}$ so you can be sure there will not be an F5 tornado in Kansas at any time during the next 20 years.
- D) You cannot tell what will happen, because nobody can be sure when an F5 tornado will occur.