

Source:

To test his prized cows' intelligence, Farmer John has trapped Bessie and Elsie in an escape room!

The escape room is a long tunnel in which the cows are traveling—Bessie at $-0.4c$ and Elsie at $0.6c$. At the start of the puzzle, both cows are at position zero in the tunnel where Farmer John is observing. To escape, Bessie has to turn on a light so Elsie sees it exactly five seconds after the challenge begins. Then, Farmer John will be satisfied that his cows are properly educated.

Bessie has a terrible sense of time and can only measure how far she has gone by regular 1-lightsecond markings on the tunnel wall. How far from the start should Bessie be when she turns on the light?