

Imagine the situation. There are two trains (train A and train B). The distance between them is 90 kilometers. Both of them left the station at the same time and moving against each other with the constant speed of 60 km/h. At the same time a bee takes off from the train A (from the windscreen of the train A for the simplification). The speed of the bee is 100 km/h. Just consider that both trains and the bee have a constant speed. When the bee touches the windscreen of the train B it changes the direction and flies back to the train A. Then again after touching of the train A, the bee turns back and flies to the train B, etc. How many kilometers the bee flew until the trains bump?

There are two ways of solution: 1. By logic,

2. Mathematically (calculation with series).

1st solution is for 2 extra points and 2nd 3 points.