

Bikes-and-Bee Problem

Two bicyclists ride toward each other on a long straight road, each with a constant speed of 10 km/h (kilometers per hour). When they are 20 km apart, a bee begins flying from the front wheel of one bicycle to the front wheel of the other bicicycle at a steady speed of 30 km/h. When the bee gets to a wheel, it abruptly turns around and flies back to touch the previous wheel, then turns around and repeats the back-and-forth trip until the bikes meet ... and SQUISH!

Question: What total distance did the bee travel in its back-and-forth trips?