

Name:

Date:

Period:

The Superfly Problem (Consolidation)

Two cars start a distance of 100 meters apart, facing each other. Car A travels east at 10 m/s; Car B travels west at 15 m/s.

Superfly is sitting on the front bumper of Car A. He has super powers that allow him to fly at a constant speed of 45 m/s and instantaneously change direction. Superfly flies toward the bumper of Car B and then instantaneously turns around and flies back toward Car A. He continues to go back and forth between the two cars until they collide. (Superfly is also invincible.)

What distance does Superfly travel before the cars collide?