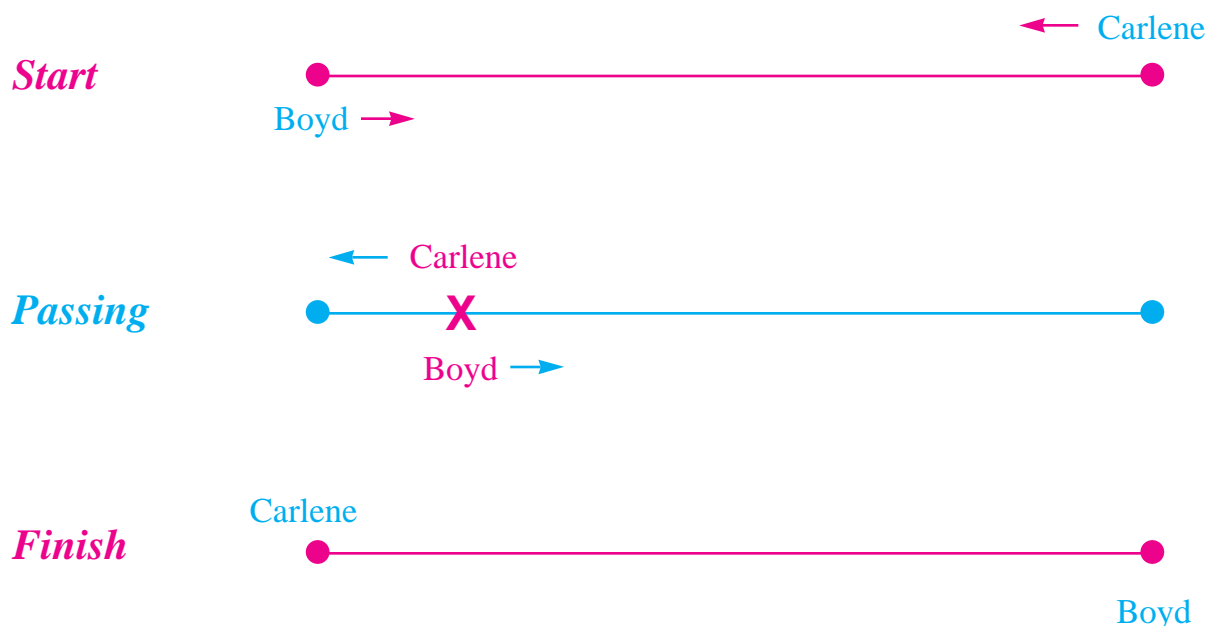


## The Bicycle and the Car

### Problem-of-the-Week

#### The Problem

Boyd the bicyclist leaves home to visit Carlene, the race-car driver. At the same time, Carlene leaves home to visit Boyd. They each proceed at a steady rate along the same road. After passing each other, Boyd takes 25 times as long to complete the trip as Carlene. Find the ratio of their speeds.



#### Strategies and Hints

1. Use  $h$  for the number of hours from the time they start until they pass each other. Then express the two distances in the second figure in terms of  $h$ .
2. From the time Boyd and Carlene pass until the finish, what distance does each of them cover?
3. From *Start* to *Passing*, Boyd and Carlene spend equal times travelling. Do they spend equal times travelling from *Passing* to *Finish*?
4. Write two different ratios comparing Boyd's time to Carlene's time.