

1. On a round trip for 540 miles in each direction, the average rate of travel going was 30 mph more than the return rate. Find the rate for each direction if the entire trip was 15 hours.
2. Barista Ben takes 5 minutes to make a salted caramel latte working alone. Barista Betty takes 3 minutes to make the same latte working alone. How long will it take Ben and Betty to make a salted caramel latte if they work together?
3. A plane that can fly 340 mph in still air can fly 200 miles downwind in the same amount of time as it can fly 140 miles upwind. Find the velocity of the wind.
4. One pipe can fill a pool 1.25 times faster than a second pipe. When both pipes are opened, they fill the pool in five hours. How long would it take to fill the pool if only the slower pipe is used?
5. The current in a river was estimated to be 5 mph. A speedboat went downstream 6 miles and came back 6 miles in 15 minutes. What was the average speed of the speedboat in still water?
6. Mrs. Felps made a round trip between St. Louis and Kansas City. Kansas City is 250 miles from St. Louis. On the return trip she increased her rate of travel by 8mph and made the trip in 30 minutes less time. Find her rate of travel in each direction.