

1. A person can row a boat at 10 mi/hr in still water. He sets out directly across a river at a spot where the current is 4 mi/hr. Find his velocity relative to the shoreline.

2. A small airplane has an air speed of 70 mi/hr. It is heading directly North. The wind is from the West at 20 mi/hr. Calculate the ground speed of the plane and the direction it is moving relative to the ground.