

10. An airplane is heading on a bearing of 102° with an air speed of 480 mph. The wind is blowing southwest (bearing 225°) at 58 mph. Find the ground speed of the airplane, its drift angle, and the bearing of its course.

11. The heading of a helicopter has a bearing of 240° . If the 70-mph wind has a bearing of 185° and the air speed of the helicopter is 195 mph, then find the ground speed of the helicopter, its drift angle, and the bearing of its course.

12. A boat is traveling at 15 mph with a bearing of $N35^\circ E$. The current is moving at 3 mph with a bearing of $S20^\circ E$. Find the boat's true speed, drift angle, and the bearing of its course.