

Name: _____
Pre-Calculus

Date: 3/18/15
Ms. Wilson

Solving Problems with Vectors

1.) An airplane is flying on a bearing of 335° at 530 mph. Find the component form of the velocity of the airplane.

2.) An airplane is flying on a compass heading (bearing) of 340° at 325mph. A wind is blowing with the bearing 320° at 40mph. a) Find the component form of the velocity of the airplane. b) Find the actual ground speed and direction of the plane.

3.) A basketball is shot at a 70° angle with the horizontal direction with an initial speed of 10m/sec. Find the component form of the initial velocity.

4.) A ship is heading due north at 12mph. The current is flowing southwest at 4mph. Find the actual bearing and speed of the ship.