1. A person runs 320 m at 30°, turns and jogs 400 m at 120° and then runs 250 m at 210 °. Find the components of each vector, find the net x and y vectors of this displacement, and then find the resultant displacement.
2. A boat sails at 12 m/s on a course of 40° for 5 min, changes course to 150° and sails for 5 minutes at 15 m/s, and finally turns on a course of 60° and sails for 5 minutes at 8 m/s. What is the net displacement of the ship after 15 minutes? (Use speed and time to find displacement for each leg, then find components, net x and y and finally the resultant displacement.