It is a fact that any spinning object experiences an acceleration due to the spin. Suppose that a ball is thrown due north with an initial speed of 4 m/s at an angle of 45° and a spin that results in a constant eastward acceleration of 1 m/s². Assuming a gravitational acceleration of 9.8 m/s², with what speed does it hit the ground? Where does it hit the ground? You don't need to simplify your answer.