Suppose a boat leaves port P headed in a direction of $70^\circ$ with the automatic pilot set for 15 knots. On this particular day, there is 5 knot ocean current with a direction of $100^\circ$.

1. At what speed and in what direction will the boat actually travel during the first hour if does not adjust for the current.
Suppose a boat leaves port P headed in a direction of 70° with the automatic pilot set for 15 knots. On this particular day, there is 5 knot ocean current with a direction of 100°.

2. At What speed and in what direction will the boat actually travel during the first hour if the captain does adjust for the current.