Name:_____

P/S	R/P	Com	Con	Rep	A/Level

Scary Reunion

A team of marine biologists are studying sharks in the Caribbean. The team has anchored their research vessel near the island of South Caicos. At 9 a.m., the team tagged two sharks with radio transmitters and released them. At 2 p.m., the team noted the location of the two sharks.

New locations:
Shark 1: Located 45 miles north and 60 miles west.
Shark 2: Located 36 miles south and 77 miles east.

If the team wanted to pull up the anchor at 2 p.m. and be in the same location as one of the sharks by 7 p.m., how fast would the research vessel need to travel to be in a location near one of the sharks? Assume each shark maintains its current speed and direction.

Provide a clear explanation of your calculations for the team.