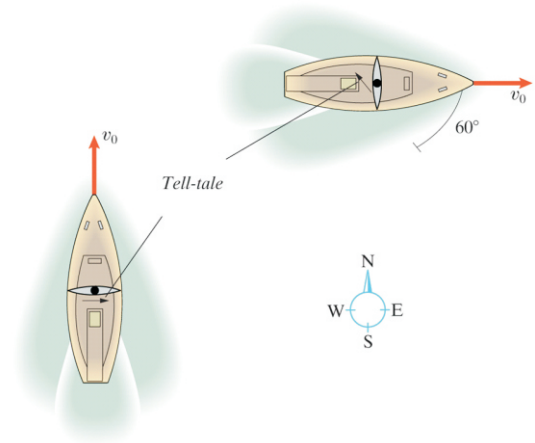


WEEK: _____ PROBLEM: _____

GIVEN:

Relative to the earth, the sailboat sails north with speed $v_0 = 6$ knots (nautical miles per hour) and then sails east at the same speed. The tell-tale indicates the direction of the wind *relative to the boat*. Determine the direction and magnitude of the wind's velocity (in knots) relative to the earth.

**REQUIRED:****SOLUTION:**