PERPENDICULAR AND PARALLEL LINES

Will the boats' paths ever cross?



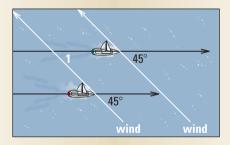


APPLICATION: Sailing

When you float in an inner tube on a windy day, you get blown in the direction of the wind. Sailboats are designed to sail against the wind.

Most sailboats can sail at an angle of 45° to the direction from which the wind is blowing, as shown below. If a sailboat heads directly into the wind, the sail flaps and is useless.

You'll learn how to analyze lines such as the paths of sailboats in Chapter 3.



Think & Discuss

- 1. What do you think the measure of $\angle 1$ is? Use a protractor to check your answer.
- 2. If the boats always sail at a 45° angle to the wind, and the wind doesn't change direction, do you think the boats' paths will ever cross?

Learn More About It

You will learn more about the paths of sailboats in Example 4 on p. 152.



APPLICATION LINK Visit www.mcdougallittell.com for more information about sailing.

