Extra Example 4 Using the Corresponding Angles Converse

Suppose that Maple Street and Oak Street follow a straight line path and intersect Route 6 at angles of 90° and 85°, as shown in the map below. If the streets continue in a straight line, will their paths ever cross?

SOLUTION
Because the corresponding angles are not congruent, Maple Street and Oak Street are not parallel. If they were parallel, then their paths would never cross. But because the two streets are not parallel, they will eventually cross paths.