

Calculus Class Worksheet Unit 7 Related Rates

Use calculus to solve the following problem. Show all of your work, including an appropriate diagram, and your answer neatly organized.

A 20-foot ladder stands upright against a vertical wall. If the lower end of the ladder is pulled away from the wall (on level ground) at the rate of 2 feet per second (fps), then how fast is the top of the ladder coming down the wall at the instant it is 12 feet above the ground?