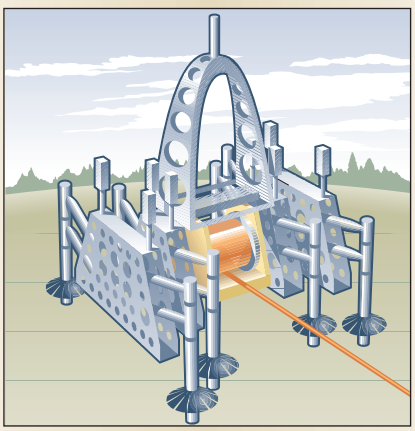
REASONING AND PROOF

How do robots use reasoning?

CHAPTER
2

APPLICATION: Robotics

Dante II is a robot that investigates live volcanoes. It processes data collected from sensors to choose a path to follow.



Think & Discuss

1. Dante II has to travel 700 feet to reach the bottom of a crater. Dante II has an average stride of 45 inches. The robot concludes that it will take about 187 steps to reach the bottom. Explain the reasoning Dante II used to reach this conclusion.
2. Instruct Dante II how to calculate the amount of steps needed to reach the bottom of any crater. Start your instructions with "If the distance to the bottom of the crater is x feet and your stride is y inches, then __?__."

Learn More About It

You will explore reasoning in robots in Exercise 49 on p. 93.

INTERNET **APPLICATION LINK** Visit www.mcdougallittell.com for more information about reasoning and robots.