CHAPTER 2

Properties of Real Numbers

Why are helicopters able to take off and land without runways?

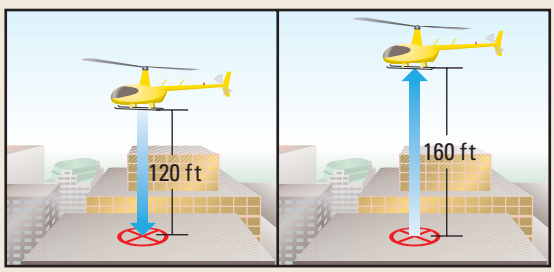
APPLICATION: Helicopters

Helicopters are capable of vertical flight—flying straight up and straight down. Rotor blades generate an upward force (lift) as they whirl through the air.

Mathematics provides a useful way of distinguishing between upward and downward motion. In this chapter you will use positive numbers to measure the velocity of upward motion and negative numbers to measure the velocity of downward motion.

Think & Discuss

1. Describe some real-life situations that you might represent with negative numbers. What do positive and negative numbers represent in each situation?
2. Describe the average speed and direction of each helicopter's movement if it travels the given distance in 15 seconds.



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Learn More About It

You will calculate the speed and velocity of different objects in Exercises 47–50 on page 75.

INTERNET **APPLICATION LINK** More about helicopters is available at www.mcdougallittell.com