

PROPERTIES OF REAL NUMBERS

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



CHAPTER

2

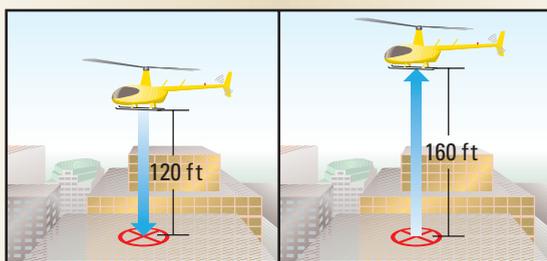
APPLICATION: Helicopters

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 we 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.
2. Describe the average speed and direction of each helicopter's movement if it travels the given distance in 15 seconds.



Not drawn to scale

Learn More About It

You will find the speed and velocity of different objects in Exercises 76–78 on p. 69.



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

