Additional Practice
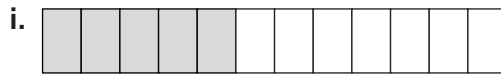
1. a. For each of the fraction strips below, write a fraction that expresses how much of the strip is shaded.

i. ii.

iii. iv.

v. vi.

b. For each of the six fraction strips above, write a fraction that expresses how much of the strip is not shaded.

c. What is the relationship between the fraction you wrote for the shaded part and the fraction you wrote for the unshaded part for each of the six fraction strips? Explain your reasoning.

2. The drawing shows the controls on a small, portable stereo system. Use the drawing to answer each of the following questions. Record all of your answers as fractions.
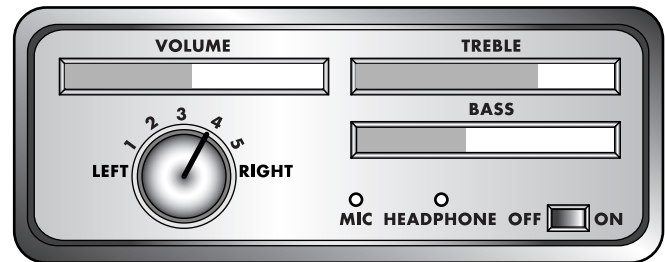
a. What fraction of the total volume is the stereo playing?

b. What fraction of the total bass output is the stereo playing?

c. What fraction of the total treble output is the stereo playing?

d. If the volume of the stereo is turned down to half the current volume, what fraction of the total volume will be the new volume? Explain your reasoning.

e. If the bass control on the stereo is adjusted up so that the stereo is playing at double the bass output it is playing at now, what fraction of the total bass output will be the new bass output? Explain your reasoning.

3. A bag contains 24 marbles (**Note:** You may want to use 24 cubes, chips, marbles, or other objects to help you solve this problem.)

a. If 16 of the marbles are removed from the bag to play a game, what fraction of the marbles are left in the bag?

b. Of the 16 marbles taken from the bag, one-fourth are put back in the bag. Now how many marbles are in the bag? Explain your reasoning.

Additional Practice *(continued)*

4. Joey's father stops at the gas station to buy gas. The car has a 16-gallon tank, and the fuel gauge says there is $\frac{3}{8}$ of a tank of gas.

  a. How many gallons of gas are in the tank?

  b. If Joey's father buys 6 gallons of gas, what fraction of the tank will the car's fuel gauge read?

  c. What fraction of the gas tank is empty after Joey's father puts 6 gallons of gas in the tank?

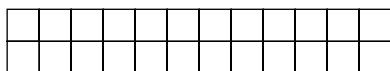**5.** For parts (a)–(b), use fraction strips or some other method to name the point with a fraction.

  a.

  b.
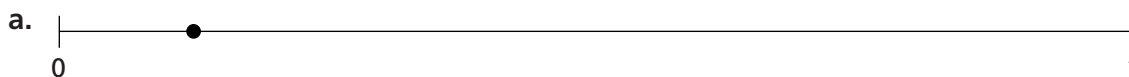
6. For parts (a)–(c), copy the grids on your paper. Shade each grid to represent the given fraction.

  a. Represent the fraction $\frac{4}{5}$ on each grid.
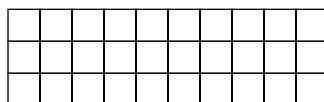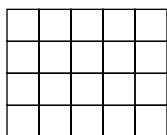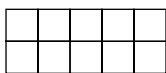
  b. Represent the fraction $\frac{3}{7}$ on each grid.
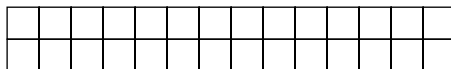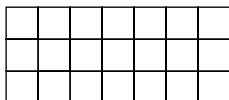
  c. Represent the fraction $\frac{1}{6}$ on each grid.

7. Tony is driving from Alma, Michigan to Elizabeth City, North Carolina. The drive covers a total distance of 1,100 miles. Tony's car can travel 400 miles on a full tank of gas. How many tanks of gas will Tony's car need for the entire trip? Explain your reasoning.