Fractions and their Word Problems

- 1. At McDonald's, a cheeseburger has $\frac{1}{10}$ pound of meat. A quarter-pounder has $\frac{1}{4}$ pound of meat.
 - a. How much more meat is used for the quarter-pounder?
- b. How much more meat is used for a quarter-pounder than a double cheeseburger?

2. A piece of paper is $8\frac{1}{2}$ inches by 11 inches. What are its dimensions if $2\frac{3}{5}$ inches are cut from the width, and $3\frac{3}{8}$ inches from the length?

Mr. Schmidt drives to work on two straight roads. One road is $6\frac{1}{3}$ miles long and the other road is $4\frac{3}{4}$ miles long. The roads are at right angles to each other. If a direct road were built between Mr. Schmidt and Hawthorne, it would be $7\frac{7}{8}$ miles long. How many miles would this road save Mr. Schmidt each trip?

- 4. Mr. Schmidt's car has a $15\frac{1}{5}$ gallon gas tank. The gas gauge shows $\frac{1}{4}$ of a tank remaining.
 - a. How many gallons of gas remain?

b. How many gallons of gas are needed to fill the tank?

- c. The gas pump fills the tank at a rate of $\frac{2}{3}$ gallons per minute. d. The gas pump fills the tank at a rate of $\frac{2}{3}$ gallons per minute. How long would it take to fill up the tank?
 - How long would it take to fill an empty tank?

5. For the following question assume there the only eye colors are blue, green, and brown. In the seventh grade, $\frac{5}{9}$ of the students

have brown eyes and $\frac{5}{12}$ have blue eyes.

- a. What fraction of the seventh grade have green eyes?
- b. What fraction of the seventh grade do not have brown eyes?
- c. If there are 108 students in the seventh grade, how many students have each type of eye color?

- 6. A rectangle has a width of $3\frac{3}{10}$ meters and a length of $5\frac{5}{6}$ meters.
 - a. What is the rectangle's area?

b. What is the rectangle's perimeter?

- 7. The area of a rectangle is $9\frac{13}{18}$ ft². If the length is $4\frac{3}{8}$ feet, what is the width?
- 8. The perimeter of a rectangle is $14\frac{11}{12}$ feet. If the length is $4\frac{3}{8}$ feet, what is the width?

9. Simplify:
$$\frac{1}{2} \cdot \frac{2}{3} \cdot \frac{3}{4} \cdot \frac{4}{5} \cdot \frac{5}{6} \cdot \dots \cdot \frac{97}{98} \cdot \frac{98}{99} \cdot \frac{99}{100}$$

- 10. $\frac{5}{8}$ of the students at Hawthorne are only Los Angeles Lakers fans. Of those who do not like the Lakers, $\frac{3}{4}$ like only the Los Angeles Clippers.
 - a. What fraction of the *entire* school does not like the Lakers?
- b. What fraction of the *entire* school likes the Clippers?
- c. What fraction of the *entire* school does not like the Clippers?
- d. What fraction of the *entire* school does not like either the Lakers or the Clippers?