Worksheet 2.5

Applications and Problem Solving.

Solve. See examples on pages 117-118 in text.

1. A recipe calls for $\frac{2}{5}$ cup of milk. How much milk should be used to make $\frac{1}{4}$ of the recipe?

A)
$$\frac{2}{10} \text{ cup}$$
 B) $\frac{3}{20} \text{ cup}$ C) $\frac{1}{20} \text{ cup}$ D) $\frac{1}{10} \text{ cup}$

Solve. See examples on pages 118-119 in text.

- 2. A child's dose of medicine is $\frac{1}{6}$ of a pre-measured dose cup. If the bottle of medicine is the size of 6 dose cups, how many children's doses are there in the bottle?
 - A) $6\frac{1}{6}$ doses B) 1 dose(s) C) 12 doses D) 36 doses

Solve. See examples on pages 119-120 in text.

3. John bought $\frac{1}{7}$ lb of thyme, $\frac{8}{7}$ lb of rosemary, and $\frac{1}{21}$ lb of dill. How many pounds of herbs did he buy in total?

A)
$$\frac{10}{21}$$
 lb B) $\frac{4}{3}$ lb C) $\frac{10}{7}$ lb D) $\frac{4}{7}$ lb

Solve. See examples on page 120 in text.

4. From a $\frac{5}{6}$ lb package of ground beef, a $\frac{1}{3}$ lb hamburger was made. How much ground beef is left in the package?

A)
$$\frac{1}{2}$$
 lb B) $\frac{2}{9}$ lb C) $\frac{7}{9}$ lb D) $\frac{4}{9}$ lb

Solve. Give your answer as a mixed numeral. See examples on pages 120-122 in text. 5. Derek spent $6\frac{3}{4}$ hours studying for his math exam and another $3\frac{5}{8}$ hours doing his math homework. How long did he spend on math in total?

A) $3\frac{5}{8}$ hours B) $3\frac{2}{8}$ hours C) $9\frac{11}{8}$ hours D) $10\frac{3}{8}$ hours

Solve. Give your answer as a mixed numeral. See examples on page 121 in text.

6. A nail $3\frac{3}{4}$ inches long is driven into a board $2\frac{1}{6}$ inches thick. How much of the nail protrudes from the other side of the board?

A)
$$3\frac{4}{5}$$
 inches B) $\frac{1}{5}$ inches C) $1\frac{7}{12}$ inches D) $\frac{1}{12}$ inches

Solve the problem. Write a mixed numeral for the answer. See examples on page 122 in text.

7. Tim needs to apply $2\frac{3}{4}$ gallons of a herbicide per acre of soybeans. How many gallons of herbicide are needed for 188 acres?

A)
$$68\frac{4}{11}$$
 gallons B) $94\frac{3}{4}$ gallons C) 97 gallons D) 517 gallons

- 8. A worker has readings that take $1\frac{1}{3}$ minutes each to read and record. How many readings can be completed in 84 minutes?
 - A) 112 readings B) 9 readings C) 29 readings D) 63 readings

Solve. See examples on page 14 in text.

9. The standard basketball court used by high school players has dimensions of 50 ft by 84 ft. The standard basketball court used by college and NBA players has dimensions of 50 ft by 94 ft. How much larger is the college/NBA court than the standard high school court?

A) 500 ft^2 B) 10 ft^2 C) 100 ft^2 D) They are the same size.

Solve. See examples on page 106 in text. **10.** $x - \frac{4}{5} = \frac{3}{7}$

A)
$$\frac{7}{12}$$
 B) $\frac{-13}{35}$ C) $\frac{43}{35}$ D) $-\frac{1}{2}$