

Unit 3 Study Guide

Name \_\_\_\_\_

Evaluate each of the following. You must show all work. Put your answer in simplest form.

1.  $2\frac{1}{2} \times 1\frac{3}{4}$

$4\frac{3}{8}$

2.  $1\frac{1}{3} \times \frac{3}{5}$

$\frac{4}{5}$

3.  $1\frac{1}{4} \times 2\frac{1}{2}$

$3\frac{1}{8}$

4.  $5 \times \frac{3}{20}$

$\frac{3}{4}$

5.  $1\frac{2}{3} \div 1\frac{1}{5}$

$1\frac{7}{10}$

6.  $4\frac{1}{4} \div 2$

$2\frac{1}{8}$

7.  $\frac{3}{4} \div 3\frac{1}{4}$

$\frac{3}{13}$

8.  $6 \div 3\frac{1}{8}$

$1\frac{23}{25}$

Solve each word problem and show all of your work. Your answer must be in simplest form.

9. A lock is turned  $\frac{1}{8}$  to the right, then  $\frac{3}{8}$  to the right again. How far is the lock turned?

$+$   $\frac{21}{40}$

10. Susan has  $\frac{1}{3}$  of an hour left to make cards. It takes her  $\frac{1}{6}$  of an hour to make each card. How many cards can she make?

$\div$  2 cards

11. A bag contains 21 cups of dog food. Your dog eats  $2\frac{1}{8}$  cups of dog food each day. How many days does one bag of dog food last?

$\div$   $9\frac{15}{17}$  days

12. Alanna, Shreesh, J'ylan, Amari, and Ethan ordered pizzas to eat while they watched Sunday Night football. Each of them ate  $\frac{2}{3}$  of a pizza. Assuming there were no whole pizzas left over, how many pizzas did they order?

$\times$  4 pizzas  $\frac{2}{3} \times \frac{5}{1} = \frac{10}{3} = 3\frac{1}{3}$

13. Mrs. Kidd ate  $\frac{1}{5}$  of a cake. Her husband ate  $\frac{1}{2}$  of what was left. What fraction of the cake did Mr. Kidd eat?

$-$ ,  $\times$    $\frac{2}{5}$  pizza

14. Find the mistake in this problem. Explain how you would correct it.

$1\frac{6}{16} \times \frac{3}{7} = 1\frac{9}{36}$

$\frac{18 \div 2}{112 \div 2} \mid \frac{9}{56}$

$\frac{33}{56}$

15. The area of a rectangle is  $\frac{2}{9}$  square yards. The width is  $\frac{1}{3}$  yard. What is the length?

$A = LW$   
 $\frac{2}{9} = \frac{1}{3} \cdot L$   $\frac{2}{3}$  yd  $\frac{2}{9} \div \frac{1}{3}$