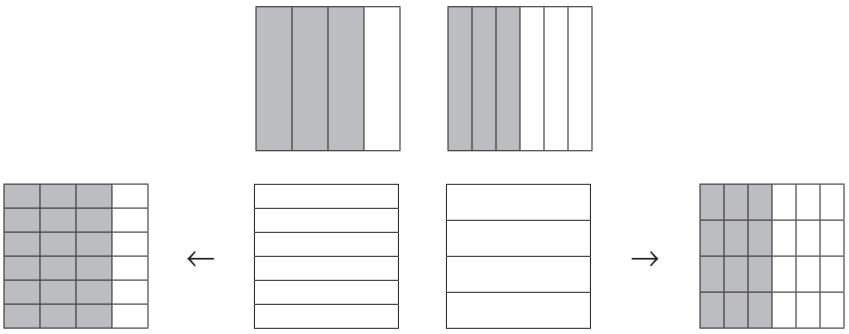
LESSON PRACTICE

Build the problems. Use the Rule of Four. Then compare the fractions. Write >, <, or = in the ovals. The first one has been done for you.

1.

$\frac{3}{4}$ $\frac{3}{6}$

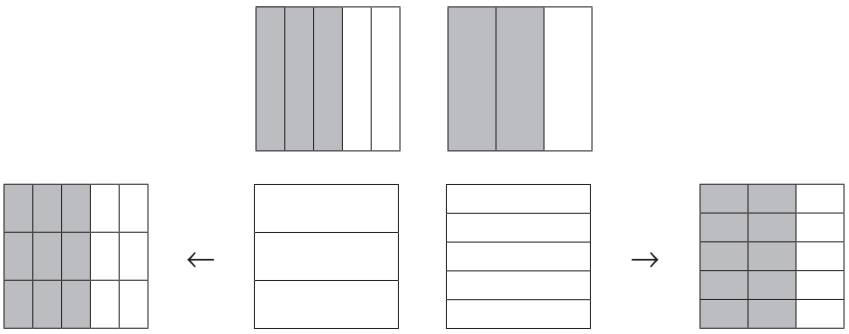


$\frac{18}{24}$ $\frac{18}{24}$ > $\frac{12}{24}$ $\frac{12}{24}$

so $\frac{3}{4}$ > $\frac{3}{6}$

2.

$\frac{3}{5}$ $\frac{2}{3}$



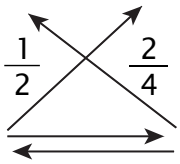
___ ___ ○ ___ ___

so $\frac{3}{5}$ ○ $\frac{2}{3}$

Build the problems. Use the Rule of Four. Then compare the fractions. Write >, <, or = in the ovals. The first one has been done for you.

3.

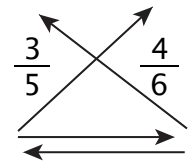
$\frac{4}{8}$ $\frac{1}{2}$ $\frac{2}{4}$ $\frac{4}{8}$



$\frac{4}{8}$ (=) $\frac{4}{8}$ so $\frac{1}{2}$ (=) $\frac{2}{4}$

4.

$\frac{3}{5}$ $\frac{4}{6}$



___ ( ) ___ so $\frac{3}{5}$ ( ) $\frac{4}{6}$

5.

$\frac{2}{3}$ $\frac{3}{4}$

___ ( ) ___ so $\frac{2}{3}$ ( ) $\frac{3}{4}$

6.

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

___ ( ) ___ so $\frac{2}{5}$ ( ) $\frac{1}{3}$

LESSON PRACTICE

Build the problems. Compare using the Rule of Four. Write >, <, or = in the ovals and the correct words in the blanks. The first one has been done for you.

1.

$\frac{3}{6}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{2}{6}$

$\frac{3}{6}$ (>) $\frac{2}{6}$ so $\frac{1}{2}$ (>) $\frac{1}{3}$

One half is greater than one third.

2.

$\frac{2}{3}$ $\frac{5}{6}$

___ ( ) ___ so $\frac{2}{3}$ ( ) $\frac{5}{6}$

Two thirds is _____ five sixths.

3.

$\frac{2}{3}$ $\frac{3}{6}$

___ ( ) ___ so $\frac{2}{3}$ ( ) $\frac{3}{6}$

Two thirds is _____ three sixths.

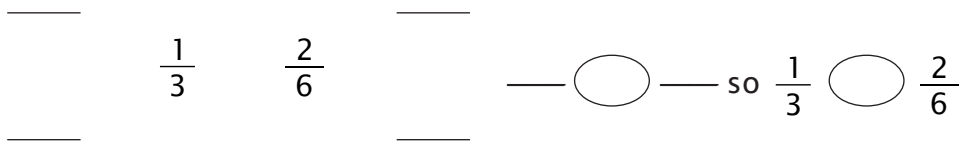
4.

$\frac{1}{2}$ $\frac{2}{5}$

___ ( ) ___ so $\frac{1}{2}$ ( ) $\frac{2}{5}$

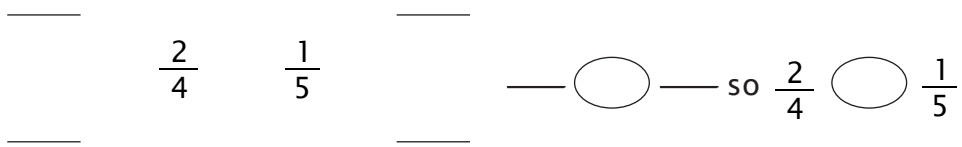
One half is _____ two fifths.

5.



One third is _____ two sixths.

6.



Two fourths is _____ one fifth.

7. One half of the students voted for Trisha as class president, while two fifths of them voted for Tom. Which person ended up with more votes?

8. Mike ran $\frac{2}{6}$ of a mile, and Donald ran $\frac{2}{3}$ of a mile. Which person ran the greater distance?

LESSON PRACTICE

Not all of these problems can be built with the fraction overlays. Compare the fractions using the Rule of Four. Write >, <, or = in the ovals and the correct words in the blanks.

1.

$\frac{4}{5}$ $\frac{4}{6}$

____ ◯ ____ so $\frac{4}{5}$ ◯ $\frac{4}{6}$

Four fifths is _____ four sixths.

2.

$\frac{4}{6}$ $\frac{2}{2}$

____ ◯ ____ so $\frac{4}{6}$ ◯ $\frac{2}{2}$

Four sixths is _____two halves.

3.

$\frac{3}{8}$ $\frac{4}{7}$

____ ◯ ____ so $\frac{3}{8}$ ◯ $\frac{4}{7}$

Three eighths is_____ four sevenths.

4.

$\frac{2}{9}$ $\frac{1}{3}$

____ ◯ ____ so $\frac{2}{9}$ ◯ $\frac{1}{3}$

Two ninths is _____one third.

Use the Rule of Four to compare the fractions. Write >, <, or = in the ovals.

5. $\frac{3}{4}$ ◯ $\frac{5}{6}$

6. $\frac{3}{6}$ ◯ $\frac{2}{4}$

7. $\frac{1}{2}$ ◯ $\frac{3}{10}$

8. $\frac{4}{5}$ ◯ $\frac{6}{7}$

9. Shirley ate one fourth of a pizza, and Andrea ate one sixth of a pizza. Which girl ate more pizza?

10. Jeremiah had $\frac{3}{5}$ of an acre of land on the east side of the road and $\frac{7}{12}$ of an acre on the west side. Which was the larger piece of land?

SYSTEMATIC REVIEW

Use the Rule of Four to compare the fractions. Write >, <, or = in the ovals.

1. $\frac{1}{3}$ ◯ $\frac{3}{6}$

2. $\frac{5}{8}$ ◯ $\frac{1}{2}$

3. $\frac{3}{12}$ ◯ $\frac{1}{4}$

Add or subtract.

4. $\frac{2}{4} + \frac{1}{6} =$ ____

5. $\frac{6}{10} - \frac{3}{8} =$ ____

6. $\frac{2}{9} + \frac{5}{7} =$ ____

Fill in the missing numbers in the numerators or denominators to make equivalent fractions.

7. $\frac{6}{8} = \frac{\quad}{16} = \frac{\quad}{24} = \frac{24}{\quad}$

Solve.

8. $\frac{1}{2}$ of 6 = ____

9. $\frac{3}{6}$ of 42 = ____

10. $\frac{3}{8}$ of 24 = ____

QUICK REVIEW

When the final remainder of a division problem doesn't divide evenly, you may write it as a fraction by writing the remainder over the divisor. Add the resulting fraction to your answer to make a mixed number. Look carefully at the example that has been done for you.

Divide fully. The first one has been done for you.

11. $4\overline{)26}$ $6\ \frac{2}{4}$
    24
    2

12. $5\overline{)23}$

13. $7\overline{)59}$

14. Alaina had 17 yards of fabric. She divided it into four equal parts to make curtains. How many yards of fabric does she have for each curtain? Include a fraction in your answer if you are unable to divide evenly.

15. Brad has completed $\frac{2}{7}$ of the chores, and Penny has done $\frac{5}{8}$ of them. Which person has completed the most chores? What part of the chores remains to be finished?

16. If Brad and Penny had a total of 56 chores to do, how many actual chores remain to be done? (See #15.)

17. One fourth of a cup of brown sugar is needed for one recipe, and one third of a cup is needed for another. How much brown sugar is needed in all?

18. During the first storm, $\frac{1}{3}$ of an inch of rain fell. The second storm gave us $\frac{7}{8}$ of an inch of rain. How much more rain fell during the second storm than during the first?

Use the Rule of Four to compare the fractions. Write >, <, or = in the ovals.

1. $\frac{3}{5}$ ◯ $\frac{1}{3}$

2. $\frac{2}{3}$ ◯ $\frac{1}{6}$

3. $\frac{9}{10}$ ◯ $\frac{7}{12}$

Add or subtract.

4. $\frac{1}{2} + \frac{2}{5} =$ ____

5. $\frac{2}{4} - \frac{1}{3} =$ ____

6. $\frac{3}{8} + \frac{3}{5} =$ ____

Fill in the missing numbers in the numerators or denominators to make equivalent fractions.

7. $\frac{1}{10} =$ ____ $=$ ____ $= \frac{4}{\quad}$

Solve.

8. $\frac{7}{8}$ of 32 = ____

9. $\frac{2}{7}$ of 21 = ____

10. $\frac{3}{4}$ of 20 = ____

Divide. Include a fraction in the answer if you are unable to divide evenly.

11. $6\overline{)32}$

12. $8\overline{)19}$

13. $5\overline{)48}$

Estimate and then multiply to find the exact answer.

14. $\begin{array}{r} 21 \\ \times\ 16 \\ \hline \end{array}$

15. $\begin{array}{r} 34 \\ \times\ 29 \\ \hline \end{array}$

16. $\begin{array}{r} 75 \\ \times\ 12 \\ \hline \end{array}$

17. One sixth of the cars that Valerie saw on her vacation were red, and one seventh of them were blue. What part of the cars that she saw was either red or blue?

18. Luke's team won $\frac{4}{7}$ of the games they played this season. If they played 28 games, how many did they win?

19. Evan's rectangular lawn measures 8 yards by 10 yards. He planted a hedge along $\frac{1}{4}$ of the perimeter. How long was his hedge?

20. Last week's storm gave us one half foot of snow. This week we had a storm that dropped three eighths of a foot. Write a comparison of the two amounts of snow from the storms using >, <, or =.

Use the Rule of Four to compare the fractions. Write >, <, or = in the ovals.

1. $\frac{5}{10}$ ◯ $\frac{6}{12}$

2. $\frac{2}{7}$ ◯ $\frac{3}{5}$

3. $\frac{1}{2}$ ◯ $\frac{2}{3}$

Add or subtract.

4. $\frac{2}{3} + \frac{1}{5} =$ ____

5. $\frac{4}{6} - \frac{1}{4} =$ ____

6. $\frac{5}{6} + \frac{1}{9} =$ ____

Fill in the missing numbers in the numerators or denominators to make equivalent fractions.

7. $\frac{3}{4} =$ ____ = ____ = ____

Solve.

8. $\frac{3}{5}$ of 10 = ____

9. $\frac{1}{4}$ of 12 = ____

10. $\frac{4}{6}$ of 24 = ____

Divide. Include a fraction in the answer if you are unable to divide evenly.

11. $3\overline{)13}$

12. $4\overline{)39}$

13. $9\overline{)58}$

Estimate and then multiply to find the exact answer.

14. $\begin{array}{r} 64 \\ \times\ 51 \\ \hline \end{array}$

15. $\begin{array}{r} 45 \\ \times\ 19 \\ \hline \end{array}$

16. $\begin{array}{r} 82 \\ \times\ 37 \\ \hline \end{array}$

17. What is the perimeter of a triangle with sides that measure 8 feet, 9 feet, and 10 feet?

18. Kiley answered $\frac{5}{6}$ of the test questions correctly, while Casey answered $\frac{4}{5}$ of the questions on the same test correctly. Write a comparison to show who had more correct answers.

19. If there were 30 questions on the test in #18, how many questions did each girl answer correctly? Write another comparison using the actual numbers. Does it agree with the comparison you wrote for #18?

20. Faith has finished $\frac{5}{8}$ of her chores, and Colleen has finished $\frac{3}{4}$ of her chores. Write a comparison to show the progress of the two girls in finishing their chores.

APPLICATION AND ENRICHMENT

Decide whether you should add or subtract to solve each problem. Follow the directions to put the correct letters in the blanks.

___	___	___	___		___	___	___
1	2	3	4		5	6	7

___	___	___	___	___	___	___	.
8	9	10	11	12	13	14	

1. A fraction of the job was done before lunch, and another fraction was finished after lunch. What part of the job has been finished?

   For addition, put R in blanks 1 and 7.

   For subtraction, put S in blank 1.

2. Jim ate one part of the pizza, and Bob ate another part. What part of the whole pizza has been eaten?

   For addition, put E in blanks 2 and 9.

   For subtraction, put T in blank 2.

3. Ava painted a fraction of the fence yesterday. When she finished work today, all of the fence was painted. What part of the fence was painted today?

   For addition, put O in blanks 3 and 6.

   For subtraction, put A in blanks 3 and 10.

4. One part of the books was biographies, and another part was poetry. What part of the books was either biography or poetry?

   For addition, put D in blank 4.

   For subtraction, put P in blank 4.

5. Yesterday it rained a fraction of an inch. Today it rained another fraction of an inch. How much more rain did we get today than we got yesterday?

   For addition, put R in blank 7 and 8.

   For subtraction, put F in blank 5.

6. Michael grew a fraction of a foot taller last year. Gabriel grew a different fraction of a foot taller the same year. What is the difference in the amount they grew?

   For addition, put F in blank 5.

   For subtraction, put O in blank 6.

7. Amy needs a fraction of a cup of honey for bread and a fraction of a cup for cookies. How much honey does she need altogether?

   For addition, put M in blank 8.

   For subtraction, put E in blanks 9 and 12.

8. Micah walked a fraction of a mile, and Brandon walked a greater fraction of a mile. How much farther did Brandon walk?

   For addition, put V in blank 10.

   For subtraction, put N in blanks 11 and 13.

9. Sammy ate a fraction of the cookies, and Tom ate another fraction of the cookies. What fraction tells the total part of the cookies that were eaten?

   For addition, put I in blank 12.

   For subtraction, put I in blank 11.

10. Kim did part of the job on Monday and another part on Tuesday. What part of the job has she completed?

    For addition, put G in blank 14.

    For subtraction, put W in blank 13 and leave blank 14 empty.