

**Lesson 2 pp. 6-10**

**Lesson Preparation**

- ÷5 AND X8 FLASH CARDS

**Drill**

- Do ÷5 AND X8 FLASH CARDS.
- Do Speed Drill 2. Time: 1 minute. Students should mark the speed drill record on page 60.

2

Flash Cards ÷5 and ×8

Speed Drill 2, page 61

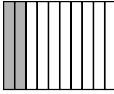
### Whole Numbers and Two-Place Decimals

A decimal with one digit after the decimal point is a one-place decimal.

One-place decimals show tenths, or wholes and tenths together.

Here are some examples:

0 wholes and 2 of 10 equal parts



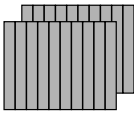
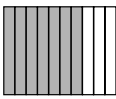
$\frac{2}{10}$  or 0.2

Say "two-tenths."

2 wholes and 7 of 10 equal parts

$2\frac{7}{10}$  or 2.7

Say "two and seventh-tenths."

Use *and* for the decimal point.

A decimal with two digits after the decimal point is a two-place decimal.

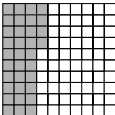
Two-place decimals show hundredths, or wholes and hundredths together.

Study these examples:

0 wholes, 34 hundredths

$\frac{34}{100}$  or 0.34

Say "thirty-four hundredths."



The oceans contain 97% of the earth's water.

**6**

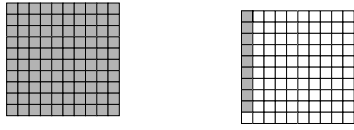
**Teaching the Lesson**

**Whole Numbers and Two-Place Decimals**

To decide if a decimal has one place or two places, count the digits to the *right* of the decimal point. One digit to the right (e.g. 37.4) is a one-place decimal. Two digits to the right is a two-place decimal (e.g. 37.48). One-place decimals show *tenths*. Two-place decimals show *tenths and hundredths*.

Lesson 2

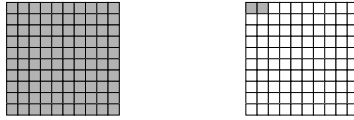
1 whole and 9 hundredths



$1\frac{9}{100}$  or 1.09

Say "one and nine-hundredths."

1 whole and 2 hundredths



$1\frac{2}{100}$  or 1.02

Say "one and two-hundredths."

**Helpful Hints**

➔ Give students plenty of oral practice saying decimals and mixed numbers. Make sure they understand that the word *and* is used to read the decimal point.

**Write the decimals.**

- 1. five-hundredths 0.05
- 2. four-tenths 0.4
- 3. twelve and five-tenths 12.5
- 4. two and twenty-eight hundredths 2.28
- 5. eighty-four hundredths 0.84
- 6. six and two-tenths 6.2

**Write the decimal for the words used in the sentence.**

**Write the words for these decimals.**

- 7. 1.55 one and fifty-five hundredths
- 8. 0.06 six-hundredths
- 9. 0.1 one tenth
- 10. Sean can carry eight and six-tenths kilograms in his backpack. 8.6



**Rounding to the Nearest Dollar**

Rounding to the nearest dollar is almost like rounding to the nearest hundred. First look at the cents. When it is 50¢ or more, round to the next higher dollar. If it is less than 50¢, keep the dollar amount the same.

- \$1.29 rounds to \$1.00 because 29¢ is less than 50¢.
- \$1.69 rounds to \$2.00 because 69¢ is more than 50¢.

**Rounding to the Nearest Dollar**



When rounding to the nearest dollar, students will be expected to write the answer with a decimal point followed by two zeros.

**Lesson 2**

**Round to the nearest dollar.** One is done for you.

11. a. \$1.85 \$2.00      b. \$7.37 \$7.00      c. \$4.62 \$5.00  
 12. a. \$3.29 \$3.00      b. \$1.91 \$2.00      c. \$6.70 \$7.00

 **We Remember**

**Find these digit sums.** Remember to use the shortcut when you can.


13. a. The digit sum of 918 is 9.      b. The digit sum of 45 is 9.  
 14. a. The digit sum of 235 is 1.      b. The digit sum of 172 is 1.

**Write the parts of a division problem.**


15. divisor       $2 \overline{)94} \begin{matrix} 47 \\ \underline{4} \\ 94 \end{matrix}$       16. quotient  
 17. dividend

**Tell how many.**

18. a. 1 gal = 4 qt      b. 9 gal = 36 qt      c. 16 qt = 4 gal  
 19. a. 10 yards = 30 feet      b. 15 feet = 3 yards      c. 7 yd = 21 ft  
 20. a. 700 cm = 7 m      b. 15 m = 1,500 cm      c. 600 cm = 6 m

 21. Thirty-six people were at Sean and Bridget's church on Sunday. Five of those who attended church were girls from Bridget's school. What fraction of the people at church were girls from Bridget's school?

$\frac{5}{36}$  of the people

 22. One-fourth of the 36 people who came to church rode on bicycles. How many people traveled to church on bicycles?

9 people



My Work Space

$$4 \overline{)36} \begin{matrix} 9 \\ \underline{36} \\ 0 \end{matrix}$$

**Teacher Notes:**

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Lesson 2

Skill Builders  $+$   $-$   $\times$   $\div$

$$\begin{array}{r} \$10.00 \\ - 3.42 \\ \hline \$ 6.58 \end{array}$$

$$\begin{array}{r} 5 \\ 28 \\ \times 7 \\ \hline 196 \end{array}$$

$$\begin{array}{r} 4 \\ \$4.05 \\ \times 8 \\ \hline \$32.40 \end{array}$$

$$\begin{array}{r} 1 \\ 2.2 \\ 4.1 \\ 3.7 \\ 6.0 \\ + 5.5 \\ \hline 21.5 \end{array}$$

$$\begin{array}{r} 8R1 \\ 4 \overline{)33} \\ \underline{32} \\ 1 \end{array}$$

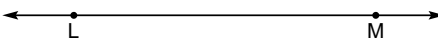
$$\begin{array}{r} 7R2 \\ 6 \overline{)44} \\ \underline{42} \\ 2 \end{array}$$

Check
7
$\times 6$
$\hline 42$
$+ 2$
$\hline 44$

$$\begin{array}{l} \text{c. } \frac{5}{8} + \frac{3}{8} = \frac{8}{8} \\ \text{d. } \frac{4}{10} + \frac{7}{10} = \frac{11}{10} \end{array}$$

Any line with two points labeled also shows two rays and a line segment. Name the line, the line segment, and the ray that points to the left. Use the symbols.

25. Line  $\overleftrightarrow{LM}$  OR  $\overleftrightarrow{ML}$

26. Line Segment  $\overline{LM}$  OR  $\overline{ML}$  

27. Ray  $\overrightarrow{ML}$

Tell how many.

28. Centi means divided into 100 parts and milli means divided into 1,000 parts.

Count by 12's to 144.

29. 12 24 36 48 60 72 80 96 108 120 132 144

Fact Focus

$$\begin{array}{lll} 30. 48 \div 8 = \underline{6} & 24 \div 8 = \underline{3} & 64 \div 8 = \underline{8} \\ 31. 32 \div 8 = \underline{4} & 72 \div 8 = \underline{9} & 56 \div 8 = \underline{7} \end{array}$$

Teacher Notes:

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Lessons 2, 3

— Mental Math . . . ? —

32. a.  $34 + 27 = \underline{61}$       b.  $63 + 48 = \underline{111}$       c.  $14 + 3 = \underline{17}$

33. a.  $26 + 3 = \underline{29}$       b. double 27 = 54      c. double 25 = 50

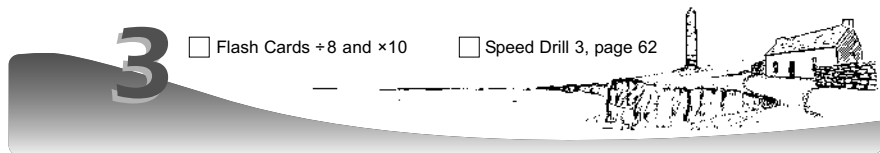
**Lesson 3 pp. 10-14**

**Lesson Preparation**

- $\div 8$  AND  $\times 10$  FLASH CARDS

**Drill**

- Do  $\div 8$  AND  $\times 10$  FLASH CARDS.
- Do Speed Drill 3. Have students mark the speed drill record on page 60.



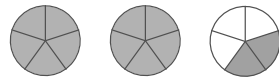
**Mixed Numbers and Improper Fractions**

You have learned that a mixed number is a whole number and a fraction together.

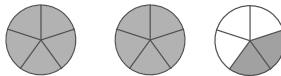
Two circles are full.

The other circle is  $\frac{2}{5}$  full.

The mixed number is  $2\frac{2}{5}$ .



We can also change mixed numbers to improper fractions.



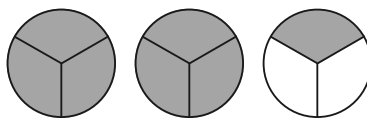
$$\frac{5}{5} + \frac{5}{5} + \frac{2}{5} = \frac{12}{5}$$

The improper fraction is  $\frac{12}{5}$ .

**Teaching the Lesson**

**Mixed Numbers and Improper Fractions**

When discussing mixed numbers, it may be helpful to refer to pies. Whole pies and pieces of pie are easy to visualize. Improper fractions like  $\frac{7}{3}$  are easy to convert to mixed numbers when we visualize seven-thirds of pie grouping themselves into two complete pies with one-third left over.



△ Teacher Aide Check on page 12.

Lesson 3

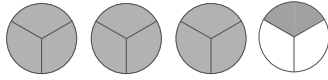
**Helpful Hints**

➔ Remind students that *proper fraction* means “a part of a whole” and *improper* means “equal to or larger than a whole.”

Write a mixed number and an improper fraction for each picture.

1. a.  $3\frac{1}{3}$

b.  $\frac{10}{3}$



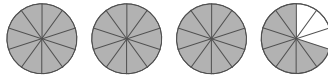
2. a.  $2\frac{8}{12}$

b.  $\frac{32}{12}$



3. a.  $3\frac{7}{10}$

b.  $\frac{37}{10}$



Write a whole number and an improper fraction for each picture.

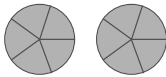
4. a.  $1$

b.  $\frac{5}{5}$



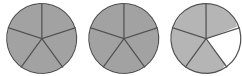
5. a.  $2$

b.  $\frac{10}{5}$



Color the circles to show  $2\frac{4}{5}$ , then write an improper fraction.

6.  $\frac{14}{5}$



 **We Remember**

Write the factors of 9.

7.  $1$   $9$   $3$

**Teacher Notes:**

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**Lesson 3**

8. The River Shannon is the longest river in Ireland. It is 386 km long. River Liffey is 121 km long. How much longer is the River Shannon?

My Work Space

$$\begin{array}{r} 386 \\ - 121 \\ \hline 265 \end{array}$$

265 km (longer)

Write the following fractions. Then circle the improper fractions.

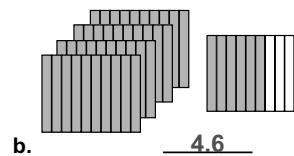
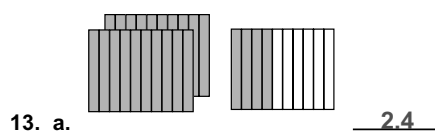
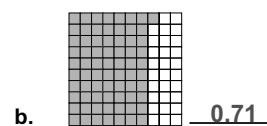
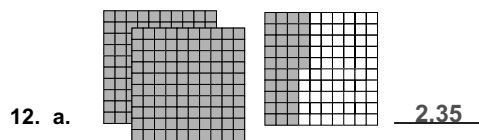
9. Denominator - 3    Numerator - double the denominator  $\frac{6}{3}$

10. Seven-sevenths  $\frac{7}{7}$

△ 11. Numerator - one half of 4    Denominator - your age teacher aide check

△ **Teacher Aide Check.**  
Check the fraction.  
Numerator is 2; denominator is student's age.

Write the decimal for each picture.



Measure the line segment to the nearest inch and centimeter.



14. about 4 inches

15. about 11 centimeters

*Teacher Notes:*

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Lesson 3

Skill Builders  $+$   $-$   $\times$   $\div$

$$16. \text{ a. } \begin{array}{r} \phantom{0}^3 \\ 207 \\ \times 5 \\ \hline 1,035 \end{array}$$

$$\text{ b. } \begin{array}{r} \phantom{0}^1 \phantom{0}^9 \\ 2,07 \\ -148 \\ \hline 59 \end{array}$$

$$\text{ c. } \frac{5}{16} - \frac{4}{16} = \frac{1}{16}$$

$$\text{ d. } \frac{3}{5} + \frac{3}{5} = \frac{6}{5}$$

$$17. \text{ a. } \begin{array}{r} \phantom{0}^1 \\ 13.2 \\ + 7.5 \\ \hline 26.1 \end{array}$$

$$\text{ b. } \begin{array}{r} 289 \\ -148 \\ \hline 141 \end{array}$$

$$\text{ c. } \begin{array}{r} 12 \\ 24 \\ + 12 \\ \hline 24 \\ 24 \end{array}$$

$$\text{ d. } \begin{array}{r} \phantom{0}^5 \\ 8.17 \\ - 0.9 \\ \hline 5.8 \end{array}$$

$$\text{ e. } \begin{array}{r} \phantom{0}^1 \phantom{0}^1 \phantom{0}^1 \\ \$27.85 \\ + 23.56 \\ \hline \$51.41 \end{array}$$

$$18. \text{ a. } \begin{array}{r} \phantom{0}^9 \text{R1} \\ 3 \overline{)28} \\ \underline{27} \\ 1 \end{array}$$

$$\text{ b. } \begin{array}{r} \phantom{0}^4 \text{R3} \\ 6 \overline{)27} \\ \underline{24} \\ 3 \end{array}$$

Check
6
$\times 4$
$\hline 24$
$+ 3$
$\hline 27$

$$\text{ c. } \begin{array}{r} \phantom{0}^9 \text{R2} \\ 4 \overline{)38} \\ \underline{36} \\ 2 \end{array}$$

Check
4
$\times 9$
$\hline 36$
$+ 2$
$\hline 38$

Write numbers from the Skill Builders section above.

19. Write the improper fraction that equals one.  $\frac{24}{24}$

20. Write the other improper fraction.  $\frac{6}{5}$

21. Write the five proper fractions.  $\frac{5}{16}$   $\frac{4}{16}$   $\frac{3}{5}$   $\frac{1}{16}$   $\frac{12}{24}$

Find these digit sums. Remember to cross out 9's where you can.

22. a. The digit sum of 46 is 1.                      b. The digit sum of 25,110 is 9.

23. a. The digit sum of 481 is 4.                      b. The digit sum of 136 is 1.

Show that you know how to read this number by writing it with words.

24. 1,046,500 is one million, forty-six thousand, five hundred

Teacher Notes:

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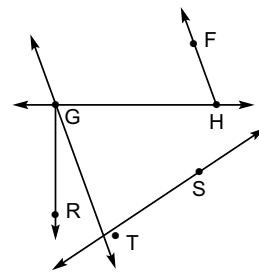
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**Lesson 3**

Use letters and symbols to name these.

25. Name the ray that is perpendicular to  $\overrightarrow{GH}$ .  $\overrightarrow{GR}$   
 26. Name the line that is parallel to  $\overrightarrow{HF}$ .  $\overleftrightarrow{GT}$  OR  $\overleftrightarrow{TG}$   
 27. Name the line that intersects  $\overline{TS}$ .  $\overleftrightarrow{TG}$  OR  $\overleftrightarrow{GT}$



Tell how many.

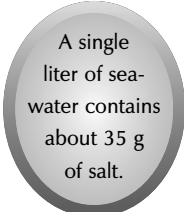
28. a. 8 yd = 24 ft      b. 30 ft = 10 yd      c. 6 yd = 18 ft  
 29. a. 90 ft = 30 yd      b. 3 yd = 9 ft      c. 27 ft = 9 yd

Answer the questions.

30. If the radius of a circle is 9 inches, what is the diameter? 18 inches  
 31. If the diameter of a circle is 20 inches, what is the radius? 10 inches

Put the commas in the numbers.

32. a. 4 5 6,1 2 3,0 5 0      b. 4 0,0 0 2,4 0 0



Round to the nearest dollar to answer the question.

33. You want to buy a book for your sister's birthday. It costs \$8.59. You have no change, only dollar bills. How much will you hand to the clerk? \$9.00

**Fact Focus**

34.  $24 \div 8 = \underline{3}$        $56 \div 8 = \underline{7}$        $72 \div 8 = \underline{9}$   
 35.  $48 \div 8 = \underline{6}$        $64 \div 8 = \underline{8}$        $32 \div 8 = \underline{4}$

**Teacher Notes:**

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