

$$\begin{array}{r} 18. \quad 378 \\ (62) \quad \times 296 \\ \hline \end{array}$$

$$\begin{array}{r} 19. \quad 800 \\ (30) \quad \times 500 \\ \hline \end{array}$$

$$\begin{array}{r} 9870 \\ 30 \\ \hline \end{array}$$

$$21. \quad 12 + 1\frac{1}{2}$$

$$22. \quad 12 - 1\frac{1}{2}$$

$$23. \quad \frac{49}{99} + \frac{49}{99}$$

Read this information. Then answer questions 24 and 25.

Gilbert did yard work on Saturday. He worked for $2\frac{1}{2}$ hours in the morning and $1\frac{1}{2}$ hours in the afternoon. He was paid \$3.50 for every hour he worked.

24. How many hours did Gilbert work in all?

25. How much money was Gilbert paid in all?

LESSON 83

Converting Units of Length

Facts Practice: 48 Uneven Divisions (Test G in Test Masters)

Mental Math: How many cents is two and a half dollars?

a. CXXIX

b. CCXLIV

c. 10% of 360

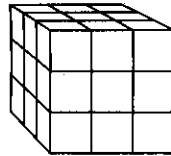
d. $3\frac{1}{3} + 1\frac{2}{3}$

e. $1 - \frac{2}{8}$

f. $\frac{1}{3}$ of 360

g. $\sqrt{49} + 3, \times 10, - 1, \div 9, - 1, \div 10$

Problem Solving: Some small cubes were stacked together to form this larger cube. How many small cubes were used?



(mm), centimeters (cm), meters (m), and kilometers (km). Units used in the U.S. Customary System* are inches (in.), feet (ft), yards (yd), and miles (mi). The chart also gives the number of units needed to equal larger units of length.

Equivalence Table for Units of Length

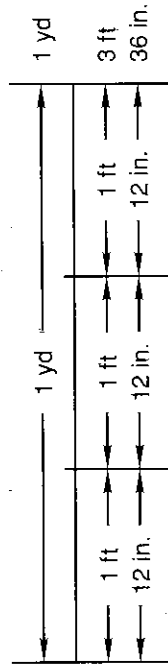
U.S. CUSTOMARY SYSTEM	METRIC SYSTEM
12 in. = 1 ft	10 mm = 1 cm
3 ft = 1 yd	1000 mm = 1 m
5280 ft = 1 mi	100 cm = 1 m
1760 yd = 1 mi	1000 m = 1 km
A meter is about 3 inches longer than a yard.	

Example 1 The star player on the basketball team is 197 centimeters tall. This is nearly how many meters tall?

Solution The chart shows that 100 centimeters equals 1 meter. The prefix *cent-* can help us remember this fact because there are **100 cents** in \$1. Since 197 centimeters is nearly 200 centimeters, the height of the basketball player is nearly **2 meters**.

Example 2 Two yards is the same length as how many inches?

Solution The chart shows us that 1 yard equals 3 feet and that each foot equals 12 inches.



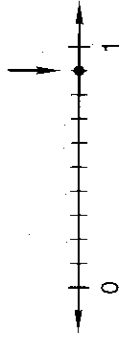
Thus, 1 yard equals 36 inches. Two yards is twice that much. Two yards equals **72 inches**.

Practice

- How many yards are in one fourth of a mile?
- Fifty millimeters is how many centimeters?
- Tom's height is 5 feet, 1 inch. How many inches tall is he?
- A 10K race is a 10-kilometer race. How many meters is 10 kilometers?

Problem set
83

- Gizmos come in a carton. A carton holds 6 packages. Each package holds 10 small boxes. Each small box holds 12 gizmos. How many gizmos come in a carton?
(65)
- When the decimal number two and three tenths is added to three and five tenths, what is the sum?
(62)
- Bacchus bought 7 pounds of grapes for \$3.43. What was the price for 1 pound of grapes?
(21)
- Compare: $\frac{3}{6}$ \bigcirc $\frac{6}{12}$
(66)
- One of the players on the basketball team is 2 meters tall. Two meters is how many centimeters?
(63)
- Use a fraction and a decimal number to name the point marked by the arrow on this number line.
(73)



- Joanne ran the 100-meter dash in 11.02 seconds. Use
(77)

- Segment RT measures 4 inches. If \overline{RS} is $2\frac{1}{4}$ inches long, how long is \overline{ST} ?
(81)



- $$\begin{array}{r} 7 \\ + 1\frac{3}{4} \\ \hline \end{array}$$

(47)
- $$\begin{array}{r} 3\frac{5}{12} \\ - 3\frac{5}{12} \\ \hline \end{array}$$

(44)
- $$\begin{array}{r} 16.2 \\ 27.35 \\ + 9.4 \\ \hline \end{array}$$

(82)
- $$\begin{array}{r} 30.1 \\ - 14.2 \\ \hline \end{array}$$

(82)
- $$\begin{array}{r} 4384 \\ 8 \\ \hline \end{array}$$

(26)
- $$\begin{array}{r} 704 \\ \times 987 \\ \hline \end{array}$$

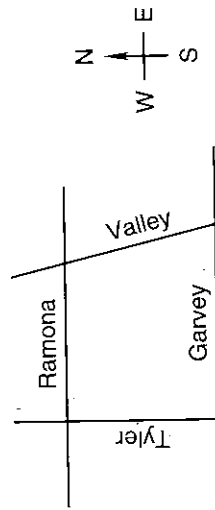
(63)
- $$\begin{array}{r} 4 \\ - 2\frac{1}{4} \\ \hline \end{array}$$

(70)
- $$\begin{array}{r} \$12.98 \\ \times 4 \\ \hline \end{array}$$

(17)

- $\$12 + 84\text{¢} + \$6.85 + 9\text{¢} + \$8 + \$98.42 + \$55.26$
(80)
- Divide and write the quotient with a fraction: $\frac{18}{5}$
(65)
- Write a decimal number equal to 2.5 that has three decimal places.
(79)
- The perimeter of a certain square is 24 inches. How long is each side of the square?
(60)

Look at this map. Then answer questions 23–25.



24. Which street is parallel to Ramona?
(54)
25. Which street is neither perpendicular nor parallel to
(54) Garvey?

LESSON 84

Changing Improper Fractions to Whole or Mixed Numbers

Facts Practice: 100 Multiplication Facts (Test C in Test Masters)

Mental Math: How many inches are in a foot? How many feet are in a yard? Hold your fingers an inch apart. Hold your hands a yard apart.

- a. CCLXVI b. CLXXIX c. $\frac{1}{3}$ of 36
d. $360 \div 30$ e. $\sqrt{81}, -1, \times 10, +1, \div 9, -9$

Problem Solving: Sam takes about 600 steps when he walks around the block. In 6 steps Sam travels about 15 feet. About how many feet does Sam travel when he walks around the block?

A fraction may be less than 1, equal to 1, or greater than 1. A fraction that is equal to 1 or is greater than 1 is called an **improper fraction**. An improper fraction has a numerator equal to or greater than the denominator.

Less than 1	Equal to 1	Greater than 1
$\frac{3}{4}$	$\frac{4}{4}$	$\frac{5}{4}$
	⏟	
	Improper fractions	

Every improper fraction can be changed either to a whole number or to a mixed number. We convert an improper fraction into a whole number or mixed number by doing the division shown by the fraction line. A fraction line is the same as a division bar. The fraction $\frac{4}{4}$ may be thought of as 4 divided by 4. The fraction $\frac{5}{4}$ may be thought of as 5