Changing Units of Measurement

This page and the following four pages will give you practice working with units of measurement. To change from one unit of measurement to another, refer to the table on page 168. It is not necessary to memorize the table, but you should become familiar with the measures listed there.

To change **from a large unit** of measurement **to a small unit, multiply** by the number of small units contained in one large unit.

EXAMPLE 1 Change 6 pounds to ounces.

STEP 1 Check the Table of Measurements on page 168 to find out how many of the small units are contained in one large unit. 1 pound = 16 ounces

STEP 2 Multiply $16 \times 6 = 96$ ounces.

To change **from a small unit** of measurement **to a large unit, divide** by the number of small units contained in one large unit.

EXAMPLE 2 Change 48 inches to feet.

STEP 1 Check the Table of Measurements on page 168 to find out how many of the small units are contained in one large unit. 1 foot = 12 inches

STEP 2 Divide $\begin{array}{r} 4 \\ 12\overline{)48} \end{array}$

Change each of the following to the unit indicated. Use the Table of Measurements to find out how many small units are contained in the large units in each problem.

1. 192 ounces = _____ pounds
2. 5 miles = _____ feet
3. 4,000 meters = _____ kilometers
4. 54 feet = _____ yards
5. 72 gallons = _____ quarts
6. 12 kilograms = _____ grams
7. 504 inches = _____ yards
8. 8 hours = _____ minutes
9. 425 meters = _____ centimeters
10. 148 pints = _____ quarts
11. 15,840 yards = _____ miles
12. 420 quarts = _____ gallons

To Be Test Wise, Know These Equivalencies

12 in. = 1 ft	16 oz = 1 lb	60 sec = 1 min	2 c = 1 pt
3 ft = 1 yd	2,000 lb = 1 ton	60 min = 1 hr	2 pt = 1 qt
5,280 ft = 1 mi	1,760 yd = 1 mi	24 hr = 1 day	4 qt = 1 gallon

Solve the following word problems. Be sure you answer the question asked.

WN 1. Celeste wants to know how long it will take her to walk from her apartment to a department store that is 4 miles away. If she walks 1 mile in 15 minutes, how many *hours* will it take her to get to the store?

a. 1 **b.** 2 **c.** 11 **d.** 30 **e.** 60

WN 2. Celeste wants to know how long it will take her to walk from her apartment to a department store that is 4 miles away. If she walks 1 mile in 15 minutes, how many *minutes* will it take Celeste to get to the store?

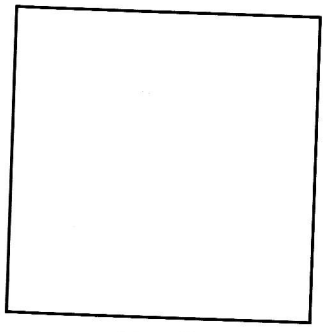
a. 1 **b.** 2 **c.** 11 **d.** 30 **e.** 60

WN 3. Each small truck from the Ace Removal Company can haul 500 pounds of trash at a time. On Tuesday the company has jobs to remove approximately 1,500 pounds of trash from one construction site, 500 pounds from another site, and 2,500 pounds from a third site. How many truckloads in all will Ace remove?

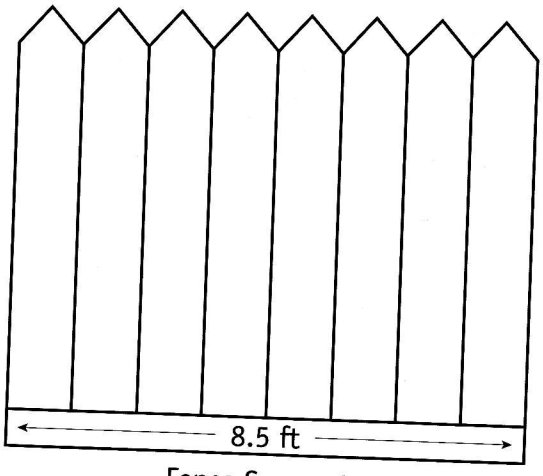
a. 3 **b.** 6 **c.** 9 **d.** 900 **e.** 4,500

WN 4. Each small truck from the Ace Removal Company can haul 500 pounds of trash at a time. On Tuesday the company has jobs to remove approximately 1,500 pounds of trash from one construction site, 500 pounds from another site, and 2,500 pounds from a third site. How may pounds in all will Ace remove?

a. 3 **b.** 6 **c.** 9 **d.** 900 **e.** 4,500



Beth's Fence



Fence Segments

D **5.** The fence that Beth needs to build is pictured above. The fencing is sold in segments as shown and is priced at $4.70 per foot. How many segments of fence will Beth have to buy?

a. 8.5 **b.** 12 **c.** 56.4 **d.** 102 **e.** 479.4

D **6.** The fence that Beth needs to build is pictured above. The fencing is sold in segments as shown and is priced at $4.70 per foot. How much money will Beth have to spend on the fence?

a. $8.50 **b.** $12.00 **c.** $56.40 **d.** $102.00 **e.** $479.40

F **7.** A standard running track is 440 yards around, or $\frac{1}{4}$ mile. At a recent track meet, Danita ran a 440-yard race and a 1-mile race. How many *yards* did she run in all?

a. $1\frac{1}{4}$ **b.** 441 **c.** 1,440 **d.** 1,760 **e.** 2,200

F **8.** A standard running track is 440 yards around, or $\frac{1}{4}$ mile. At a recent track meet, Danita ran a 440-yard race and a 1-mile race. How many *miles* did she run in all?

a. $1\frac{1}{4}$ **b.** 441 **c.** 1,440 **d.** 1,760 **e.** 2,200