United States System of Measurement Practice Problems

Now you get a chance to work out some problems. You may use a calculator if you would like. Study each of these problems carefully; you will see similar problems on the lesson knowledge check. You will need paper and a pencil to complete the following exercises. You will be able to check your answers with the link provided within the lesson to see how you well you did.

Make the following conversions. If a fraction occurs, convert it to a decimal rounded to two decimal places.

1) According to specifications, the wire resistance allowable for a job cannot exceed 0.1 OHMS. 12 gauge wire reaches 0.1 OHMS of resistance at 756 inches.

   A) Calculate that length in feet.

   B) Calculate that length in yards.

2) Coaxial cable for a typical digital TV signal begins to lose signal strength after 34 yards.

   A) Calculate that length in feet.

   B) Calculate that length in inches.

3) A cell phone company calculates that each cell tower can reach 3.2 miles.

   A) Calculate that length in feet. B)

   Calculate that length in yards. C)

   Calculate that length in inches.

4) A wireless router supports a range of up to 1,800 inches indoors.

   A) Calculate that length in feet.

   B) Calculate that length in miles.

5) A local library researched the amount of time each computer was logged on to the Internet on non-library related Web surfing. The average time per week was 2,282.4 minutes.

    A) Calculate that length of time in hours.

    B) Calculate that length of time in days.

    C) Calculate that length of time in weeks.

Make each conversion using unit fractions. If fractions occur, convert them to decimals rounded to two decimal places.

1) Convert 18 feet to yards.

2) Convert 2 miles to feet.

3) Convert 9 quarts to pints.

4) Convert 52 minutes to hours.

5) Convert 412 hours to weeks.

6) Convert 14 yards to feet.

7) Convert 3 miles to yards.

8) Convert 8 miles to inches.

9) Convert 18 inches to feet.

10) Convert 84 inches to yards.

11) Convert 106 feet to miles.

12) Convert 5 pounds to ounces.

13) Convert 4 ounces to pounds.

14) Convert 15,000 ounces to tons.

15) Convert 9 tablespoons to teaspoons.

16) Convert 3 cups to tablespoons.

17) Convert 16 teaspoons to cups.

18) Convert 18 minutes to seconds.

Resource:

Ellis, W., & Burzynski, D. (2010, August 18). Measurement and Geometry: Measurement and the United States System. Retrieved from: http://cnx.org/content/m35018/1.2/

Measurement and Geometry: Area and Volume of Geometric Figures and Objects by Ellis, W., & Burzynski, D. © 2010 retrieved from http://cnx.org/content/m35023/1.2/ and used under a Creative Commons Attribution http://creativecommons.org/licenses/by/3.0/. This practice exercise is an adaption titled, *United States System of Measurement,* by the National Information Security and Geospatial Technologies Consortium (NISGTC) and is licensed under the Creative Commons Attribution 3.0 Unported License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/3.0/.