

Converting Similar Units

Metric Distances

1 centimeter = 10 millimeters
1 meter = 1,000 millimeters
1 meter = 100 centimeters
1,000 meters = 1 kilometer

Metric Weights

1 gram = 1,000 milligrams
1,000 grams = 1 kilogram
Metric Liquid Capacities
1 liter = 1,000 milliliters

Imperial Distances

12 inches = 1 foot
3 feet = 1 yard
1760 yards = 1 mile

Imperial Liquid Capacities

8 ounces = 1 cup
4 cups = 1 quart
4 quarts = 1 gallon

Imperial Weights

16 ounces = 1 pound
2,000 pounds = 1 ton

When finding the smaller unit, we must multiply.

How many cups is 3 quarts?

$$1 \text{ cup} = 4 \text{ quarts}$$

$$1 \times 3 \text{ cups} = 4 \times 3 \text{ quarts}$$

$$3 \text{ cups} = 12 \text{ quarts}$$

When finding the larger unit to a larger unit, we must divide.

How many grams is 870 milligrams?

$$870 \text{ milligrams} = x \text{ grams}$$

$$1000 \text{ milligrams} = 1 \text{ gram}$$

$$870 \div 1000 \text{ milligrams} = 0.87 \text{ grams}$$

1. How many centimeters is 80 millimeters? _____ centimeters
2. How many milligrams is 7 grams? _____ milligrams
3. How many feet is 72 inches? _____ feet
4. How many cups is 96 ounces? _____ cups
5. How many pounds is 64 ounce? _____ pounds
6. How many meters is 630 millimeters? _____ meters
7. How many grams is 5.1 kilograms? _____ grams
8. How many feet is 33 yards? _____ feet
9. How many cups is 10 quarts? _____ cups
10. How many pounds is 2.8 tons? _____ pounds
11. How many meters is 0.25 kilometers? _____ meters
12. How many yards is 0.4 kilograms? _____ yards
13. How many quarts is 3 gallons? _____ quarts
14. How many meters is 82 centimeters? _____ meters
15. How many liters is 4,320 milliliters? _____ liters