

Grade 5 - Converting Measurement Units - Answer Key

Common Core 5.MD.A.1 · maths-pdf.fr/en/

Each solution names the conversion factor, shows whether to multiply or divide, and gives the final answer with its unit. Use it to check your work and to see the steps for the word problems.

Grade 5 · Common Core State Standards: **5.MD.A.1**

Exercise 1 - Feet to inches

Changing ft to in means a smaller unit, so multiply by 12.

$$4 \times 12 = 48$$

$$4 \text{ ft} = 48 \text{ in}$$

Exercise 2 - Yards to feet

Changing yd to ft means a smaller unit, so multiply by 3.

$$5 \times 3 = 15$$

$$5 \text{ yd} = 15 \text{ ft}$$

Exercise 3 - Pounds to ounces

Changing lb to oz means a smaller unit, so multiply by 16.

$$3 \times 16 = 48$$

$$3 \text{ lb} = 48 \text{ oz}$$

Exercise 4 - Quarts to pints

Changing qt to pt means a smaller unit, so multiply by 2.

$$6 \times 2 = 12$$

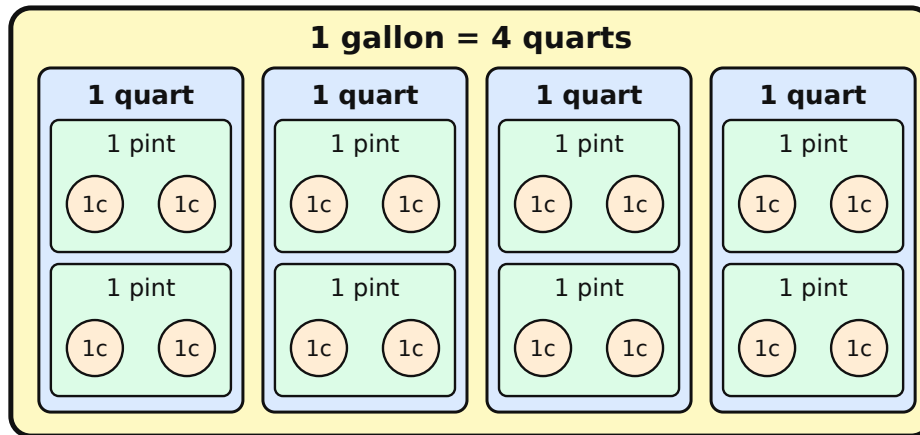
$$6 \text{ qt} = 12 \text{ pt}$$

Exercise 5 - Gallons to quarts

The diagram shows 4 quarts in 1 gallon.

Changing gallons to quarts means a smaller unit, so multiply by 4.

$$2 \times 4 = 8$$



1 gallon = 4 quarts = 8 pints = 16 cups.

$$2 \text{ gal} = 8 \text{ qt}$$

Exercise 6 - Meters to centimeters

Changing m to cm means a smaller unit, so multiply by 100.

$$7 \times 100 = 700$$

$$7 \text{ m} = 700 \text{ cm}$$

Exercise 7 - Kilometers to meters

Changing km to m means a smaller unit, so multiply by 1,000.

$$3.5 \times 1,000 = 3,500$$

$$3.5 \text{ km} = 3,500 \text{ m}$$

Exercise 8 - Grams to kilograms

Changing g to kg means a larger unit, so divide by 1,000.

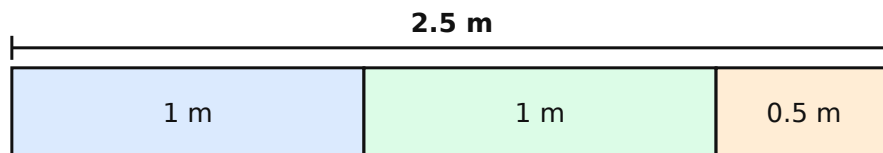
$$4,000 \div 1,000 = 4$$

$$4,000 \text{ g} = 4 \text{ kg}$$

Exercise 9 - Centimeters to meters

Changing centimeters to meters means a larger unit, so divide by 100.

$$250 \div 100 = 2.5$$



$$250 \text{ cm} = 2.5 \text{ m.}$$

$$250 \text{ cm} = 2.5 \text{ m}$$

Exercise 10 - Inches to feet

Changing in to ft means a larger unit, so divide by 12.

$$72 \div 12 = 6$$

$$72 \text{ in} = 6 \text{ ft}$$

Exercise 11 - Ounces to pounds

Changing oz to lb means a larger unit, so divide by 16.

$$24 \div 16 = 1.5$$

$$24 \text{ oz} = 1.5 \text{ lb}$$

Exercise 12 - Pints to quarts

Changing pt to qt means a larger unit, so divide by 2.

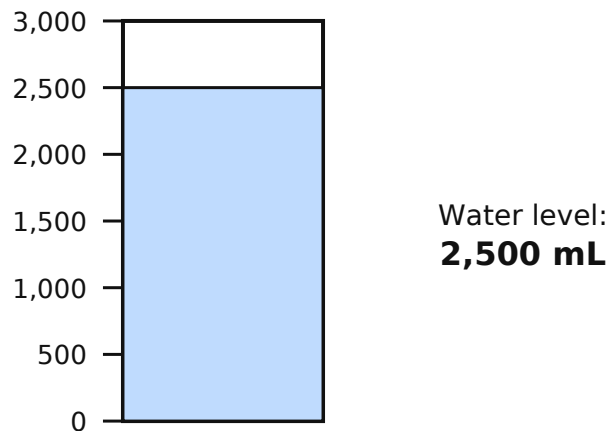
$$10 \div 2 = 5$$

$$10 \text{ pt} = 5 \text{ qt}$$

Exercise 13 - Milliliters to liters

Changing milliliters to liters means a larger unit, so divide by 1,000.

$$2,500 \div 1,000 = 2.5$$



A measuring container with the water level at 2,500 mL.

$$2,500 \text{ mL} = 2.5 \text{ L}$$

Exercise 14 - Compare lengths

Convert yards to inches. $1 \text{ yd} = 36 \text{ in}$, so $3 \times 36 = 108 \text{ in}$.

$$108 > 100.$$

$$3 \text{ yd} > 100 \text{ in}$$

Exercise 15 - Miles to feet

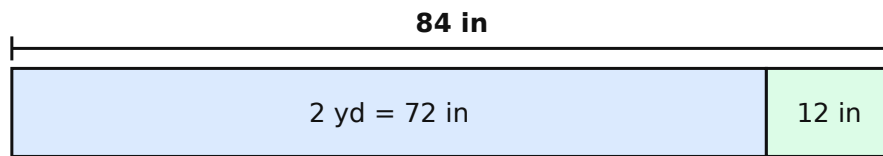
1 mile = 5,280 feet. Multiply: $3 \times 5,280 = 15,840$.

15,840 ft

Exercise 16 - Length of a board

2 yd = 6 ft, so the board is $6+1=7$ ft long.

7 ft = $7 \times 12 = 84$ in.



$72+12=84$ inches.

84 inches

Exercise 17 - Milk for a recipe

(a) 1 qt = 4 c, so $3 \times 4 = 12$ cups.

(b) 1 gal = 4 qt = 16 c. After pouring 12 c, $16-12=4$ cups are left.

(a) 12 cups; (b) 4 cups

Exercise 18 - Bags of gravel

2 tons = $2 \times 2,000 = 4,000$ pounds.

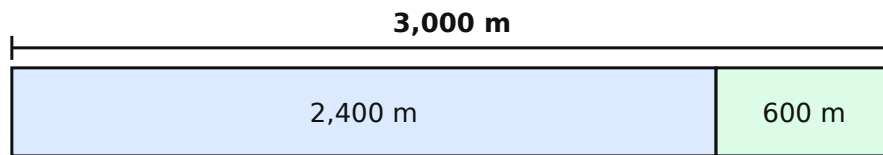
$4,000 \div 50 = 80$.

80 bags

Exercise 19 - Track practice

6 laps: $6 \times 400 = 2,400$ m. Goal: 3 km = 3,000 m.

$3,000 - 2,400 = 600$.



She needs 600 more meters.

600 meters

Exercise 20 - Party punch

(a) $2 \text{ qt} = 8 \text{ c}$ and $3 \text{ pt} = 6 \text{ c}$. Total: $8+6+5=19$ cups.

(b) $1 \text{ gal} = 16 \text{ c}$. Since $19 > 16$, the punch does not fit. It is 3 cups too much.

(a) 19 cups; (b) No, it is 3 cups over.