

Measure It Out

Solve real measurement problems with careful units.

GRADE 4 • 4.MD.A.2

CCSS.Math.Content.4.MD.A.2 "Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals..."

NAME _____

DATE _____

MATCH THE UNITS

First, decide what measurement unit the question asks for. Convert to the same unit before you calculate. A number line can show equal measurement jumps, and each interval has the same value.

WORKED EXAMPLE

A cooler holds 5 quarts of water.
How many cups of water does it hold?

- 1 quart = 4 cups.
- Multiply: $5 \times 4 = 20$.
- The cooler holds 20 cups.

Answer: 20 cups

PRACTICE 6 problems

- 1** A rope is 7 yards long. How many inches long is the rope? Use 1 yard = 36 inches.

ANSWER _____

- 2** The number line shows a bike route. Each space is 3 meters. How far is point X from 0?
- 0 m |---|---|---|---|---|---X

ANSWER _____

- 3** A concert starts at 2:18 p.m. and ends at 3:47 p.m. How long does the concert last?

ANSWER _____

- 4** A recipe needs $\frac{2}{3}$ cup of yogurt. You have already added $\frac{1}{6}$ cup. How much more yogurt is needed?

ANSWER _____

- 5** A puppy weighs 8 pounds. How many ounces does it weigh? Use 1 pound = 16 ounces.

ANSWER _____

- 6** A game costs \$1.32. What is the cost of 3 games?

ANSWER _____

APPLY IT Show your work

- 1** The school gaming club's tournament starts at 9:18 a.m. and ends at 12:47 p.m. How long is the tournament?

WORK SPACE

ANSWER _____

- 2** At the book fair, Nia buys a comic for \$7.28 and a puzzle book for \$6.43. She pays with \$15.00. How much change does she get?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A track team has 2 meters of ribbon. It cuts 3 pieces that are 37 centimeters each. How many centimeters of ribbon are left? Show the conversion and calculations.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A rope is 7 yards long. How many inches long is the rope? Use 1 yard = 36 inches.	252 inches
2	The number line shows a bike route. Each space is 3 meters. How far is point X from 0? 0 m --- --- --- --- ---X	18 meters
3	A concert starts at 2:18 p.m. and ends at 3:47 p.m. How long does the concert last?	1 hour 29 minutes
4	A recipe needs $\frac{2}{3}$ cup of yogurt. You have already added $\frac{1}{6}$ cup. How much more yogurt is needed?	$\frac{1}{2}$ cup
5	A puppy weighs 8 pounds. How many ounces does it weigh? Use 1 pound = 16 ounces.	128 ounces
6	A game costs \$1.32. What is the cost of 3 games?	\$3.96

PART 2 • APPLY IT

- 3 hours 29 minutes** Count from 9:18 to 12:18 for 3 hours, then count 29 more minutes to 12:47.
- \$1.29** $\$7.28 + \$6.43 = \$13.71$. $\$15.00 - \$13.71 = \$1.29$.

CHALLENGE

89 centimeters

Accept correct units with each answer. For the fraction problem, accept $\frac{1}{2}$ or an equivalent fraction, such as $\frac{3}{6}$.