LESSON MAKER PRO

# Community Measure Mix

*Convert units to plan routes, supplies, and activities.*

**GRADE 5 · MT.5.MD.1**

**MT.5.MD.1** "Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multi-step problems in context..."

NAME _____ DATE _____

## CONVERT, THEN COMBINE

In customary units, 1 yard = 3 feet, 1 foot = 12 inches, 1 quart = 2 pints, and 1 pint = 2 cups. To change a larger unit to a smaller unit, multiply; to change a smaller unit to a larger unit, divide. In a multi-step problem, convert to the same unit before you add or subtract.

**WORKED EXAMPLE**

How many inches are in 7 yards?

1. Convert yards to feet: 7 × 3 = 21 feet.
2. Convert feet to inches: 21 × 12 = 252 inches.

**Answer: 252 inches**

## PRACTICE 6 problems

**1** A banner needs 4 yards of ribbon. How many feet is that?

**ANSWER** _____

**2** A game lane is 48 inches wide. How many feet wide is it?

**ANSWER** _____

**3** A jug holds 6 quarts of water. How many pints does it hold?

**ANSWER** _____

**4** A snack stand has 24 cups of cider. How many quarts is that?

**ANSWER** _____

**5** A bike route is 2 miles long. How many yards is that? Use 1 mile = 1,760 yards.

**ANSWER** _____

**6** A piece of cloth is 4 feet 8 inches long. How many inches long is it?

**ANSWER** _____

## APPLY IT Show your work

**1** For a Blackfeet community fun run in Browning, a student plans a 1-mile loop. She runs the loop twice, then walks another 880 yards. How many yards does she travel in all? Use 1 mile = 1,760 yards.

WORK SPACE

**ANSWER** _____

**2** Students in Pablo, on the Flathead Reservation, plan a garden day for their community. They fill 4 watering cans with 2 quarts each, then use 6 pints of water. How many pints remain? Use 1 quart = 2 pints.

WORK SPACE

**ANSWER** _____

## CHALLENGE One step up

A group in Pablo plans a 2-mile walk. They mark 2,100 yards of the route in the morning and 2,400 feet in the afternoon. How many yards still need marks? Explain your conversions. Use 1 mile = 1,760 yards and 1 yard = 3 feet.

WORK SPACE AND ANSWER

**ANSWER KEY**

# Community Measure Mix

**GRADE 5 · MT.5.MD.1**

## PART 1 · PRACTICE

| # | PROBLEM | ANSWER |
|---|---|---|
| 1 | A banner needs 4 yards of ribbon. How many feet is that? | **12 feet** |
| 2 | A game lane is 48 inches wide. How many feet wide is it? | **4 feet** |
| 3 | A jug holds 6 quarts of water. How many pints does it hold? | **12 pints** |
| 4 | A snack stand has 24 cups of cider. How many quarts is that? | **6 quarts** |
| 5 | A bike route is 2 miles long. How many yards is that? Use 1 mile = 1,760 yards. | **3,520 yards** |
| 6 | A piece of cloth is 4 feet 8 inches long. How many inches long is it? | **56 inches** |

## PART 2 · APPLY IT

1. **4,400 yards** Two loops are 2 × 1,760 = 3,520 yards. Add 880 yards to get 4,400 yards.
2. **10 pints** The cans hold 4 × 2 = 8 quarts, or 16 pints. After 6 pints are used, 10 pints remain.

## CHALLENGE

**The route is 3,520 yards, and 2,400 feet is 800 yards. They marked 2,900 yards altogether, so 620 yards still need marks.**

Accept equivalent calculations that convert units before combining amounts. For the challenge, the explanation should show that 2,400 feet equals 800 yards.