

Unit Switch Quest

Convert first, then solve.

GRADE 5 • MA.5.M.1.1

MA.5.M.1.1 "Solve multi-step real-world problems that involve converting measurement units to equivalent measurements within a single system of measurement."

NAME _____

DATE _____

CONVERT, THEN COMPUTE

When a problem uses two units, convert to one unit before you add, subtract, multiply, or divide. Use a conversion fact, such as 1 week = 7 days, and label your answer with a unit.

WORKED EXAMPLE

A movie festival shows one movie for 3 hr 40 min and another for 2 hr 25 min. How many minutes do the movies last altogether?

1. $3 \text{ hr} = 180 \text{ min.}$

2. $180 + 40 = 220 \text{ min.}$

3. $2 \text{ hr } 25 \text{ min} = 145 \text{ min.}$

4. $220 + 145 = 365 \text{ min.}$

Answer: 365 min

PRACTICE 5 problems

- 1** A path is 4 yd 1 ft long. How many feet is that?

ANSWER _____

- 2** A shelf is 6 ft 8 in long, and another shelf is 5 ft 4 in long. How many inches long are they altogether?

ANSWER _____

- 3** One bag holds 7 lb 9 oz of dog food. Another holds 4 lb 11 oz. How many ounces are there altogether?

ANSWER _____

- 4** One tank has 4 gal 1 qt. Another has 5 gal 4 qt. How many quarts are there altogether?

ANSWER _____

- 5** A trail is 6 km 450 m long. A runner goes to the end and back. How many meters does the runner travel?

ANSWER _____

APPLY IT Show your work

- 1** A robotics team fills 4 jugs with 1 L 750 mL of water each. They pour the water equally into 7 bottles. How many milliliters of water go in each bottle?

WORK SPACE

ANSWER _____

- 2** The drama club has 5 strips of fabric. Each strip is 6 ft 8 in long. They use 1 ft 4 in of the total fabric for name tags. How many inches of fabric are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A pet shelter has 7 water jugs. Each jug holds 1 gal 1 qt. The shelter uses 5 qt to wash bowls, then shares the rest equally among 6 pens. How many quarts of water does each pen get?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A path is 4 yd 1 ft long. How many feet is that?	13 ft
2	A shelf is 6 ft 8 in long, and another shelf is 5 ft 4 in long. How many inches long are they altogether?	144 in
3	One bag holds 7 lb 9 oz of dog food. Another holds 4 lb 11 oz. How many ounces are there altogether?	196 oz
4	One tank has 4 gal 1 qt. Another has 5 gal 4 qt. How many quarts are there altogether?	41 qt
5	A trail is 6 km 450 m long. A runner goes to the end and back. How many meters does the runner travel?	12,900 m

PART 2 • APPLY IT

1. **1,000 mL** Convert each jug to 1,750 mL, then find $4 \times 1,750 = 7,000$ mL. Divide 7,000 mL by 7 bottles.
2. **384 in** Convert each strip to 80 inches and find $5 \times 80 = 400$ inches. Convert 1 ft 4 in to 16 inches, then subtract.

CHALLENGE**5 qt**

Accept equivalent units when correct, such as 1,000 mL for 1 L. Students should show conversions before combining measurements.