

## KEY CONCEPT OVERVIEW

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In Lessons 6 through 11, students solve problems involving mixed units of capacity, length, weight, and time.

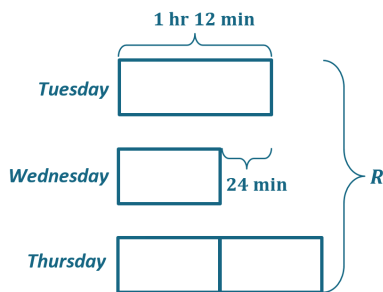
You can expect to see homework that asks your child to do the following:

- Add and subtract mixed measurement units. (See Sample Problem.)
- Use the **RDW process** to solve multi-step measurement word problems.

## SAMPLE PROBLEM (From Lesson 10)

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Jennifer ran for 1 hour 12 minutes on Tuesday. On Wednesday, she ran 24 minutes less than she did on Tuesday. On Thursday, she ran twice as many minutes as she did on Wednesday. How much time did Jennifer spend running during that three-day period?



**Tuesday: 1 hr 12 min = 60 min + 12 min = 72 min**

**Wednesday: 72 min – 24 min = 48 min**

**Thursday: 48 min + 48 min = 96 min**

**$R = 72 \text{ min} + 48 \text{ min} + 96 \text{ min} = 216 \text{ min} = 3 \text{ hr } 36 \text{ min}$**

$$\begin{array}{r} 180 \text{ min} \quad 36 \text{ min} \\ | \\ 3 \text{ hr} \end{array}$$

**Jennifer spent 3 hours 36 minutes running during the three-day period.**

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at [GreatMinds.org](http://GreatMinds.org).

**HOW YOU CAN HELP AT HOME**

- When you find yourself working with units of measure during the day, ask your child questions about your activities. For example, you might say, “The directions on the box say to bake this bread for 1 hour 10 minutes. I want to check the bread 15 minutes before the time is up to make sure that it doesn’t burn. For how many minutes should I set the timer?” (55 minutes)
- Find a tape measure that a carpenter might use and show it to your child. Pull out the tape and ask him to examine the measurements. Are they metric units (i.e., centimeters) or standard units (i.e., inches)? How can you tell? Next, ask your child to use the tape measure to prove the equivalence of measurements. For example, you might ask him to prove that 1 foot 3 inches is equivalent to 15 inches.

**TERMS**

**RDW process:** A three-step process used in solving word problems that requires students to 1) read the problem for understanding, 2) draw a picture or model, and 3) write an equation and a statement of their answer.

**MODELS**

**Conversion Table**

Measurement Conversions	
1 kilometer	1,000 meters
1 meter	100 centimeters
1 yard	3 feet
1 foot	12 inches
1 pound	16 ounces
1 kilogram	1,000 grams
1 liter	1,000 milliliters
1 gallon	4 quarts
1 quart	2 pints
1 pint	2 cups
1 minute	60 seconds
1 hour	60 minutes
1 day	24 hours
1 week	7 days

**Tape Diagrams**

