

# Grade 6 - Converting Measurement Units with Ratios - Test

Common Core 6.RP.A.3d · [maths-pdf.fr/en/](https://maths-pdf.fr/en/)

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

This **unit conversions test** for 6th Grade covers converting measurement units with ratios (Common Core 6.RP.A.3d), with a free PDF to print.

This 45-minute test has 9 questions worth 20 points. It covers customary and metric conversions, comparing measurements, rate conversion, and word problems (Common Core 6.RP.A.3d). Show your work.

## Time and points

### About this test

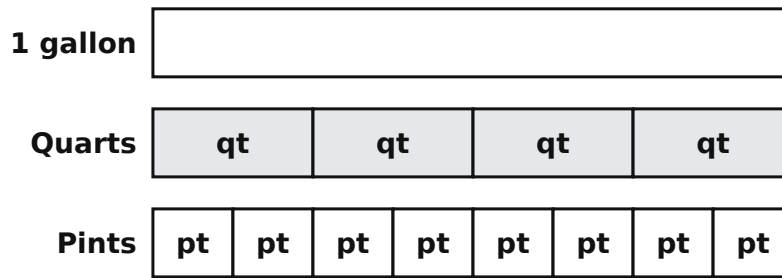
- Grade: Grade 6
- Chapter: Converting Measurement Units with Ratios
- Standards: 6.RP.A.3d
- Time: 45 minutes
- Total: 20 points

## Unit conversions test: questions

### Question 1 - Customary lengths [2 pts]

- Convert 7 yards to feet.
- Convert 60 inches to feet.

### Question 2 - Capacity [2 pts]



Units of liquid volume.

A water jug holds 6 gallons. Find the number of quarts and the number of pints it holds.

### Question 3 - Metric mass [2 pts]

- Convert 4.8 kilograms to grams.
- Convert 650 grams to kilograms.

### Question 4 - Time [2 pts]

A movie is 2 hours 15 minutes long. Convert the length to minutes and then to seconds.

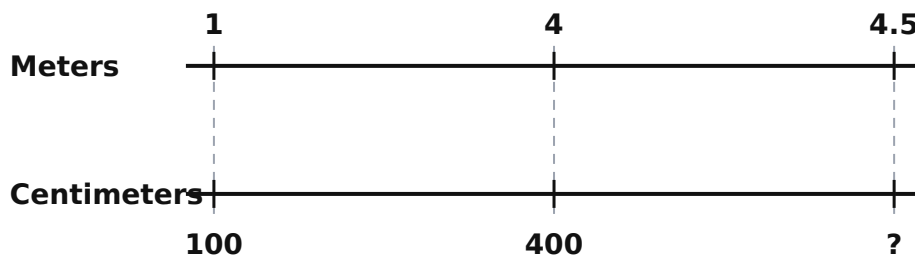
### Question 5 - Comparing [2 pts]

Which is greater, 3.2 liters or 3,500 milliliters? Show how you convert.

### Question 6 - Rate conversion [2 pts]

A cyclist rides 18 miles per hour. How many miles does she ride in 20 minutes?

### Question 7 - Double number line [2 pts]



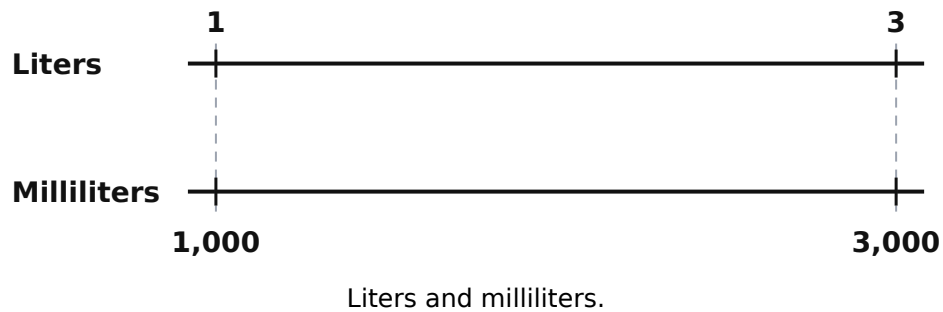
Meters and centimeters.

Convert 4.5 meters to centimeters.

### Question 8 - Ribbon [3 pts]

A craft store sells ribbon for \$0.45 per foot. Sofia needs 4 yards of ribbon. Find the cost.

### Question 9 - Water bottles [3 pts]



A team has a 3-liter cooler of water. Each player drinks 250 milliliters. Find how many players can have a full serving, and how many milliliters are left.

#### Key facts behind this unit conversions test

##### Key facts

- A conversion factor is a ratio between two units, like 12 inches to 1 foot.
- Larger unit to smaller unit: multiply. Smaller to larger: divide.
- Metric conversions use 10, 100, and 1,000.
- Convert to the same unit before comparing amounts.
- Rates can be converted by converting each unit in turn.

#### How to use this unit conversions test

Time yourself: the test is designed for an average student in 45 minutes. Answer the questions you are sure of first, then come back to the longer ones and check your units.