

Converting Units with Ratio Reasoning

Grade 6 math · Test · Standards: 6.RP.A.3d

Name: _____ Date: _____ Class: _____

This test has 9 questions worth 20 points in total and fits a 45-minute period. Show all work and write the unit in each answer. No calculator is needed beyond basic arithmetic.

Standards: 6.RP.A.3d · **Level:** Grade 6

Time: 45 minutes · 9 questions · Total: 20 points · Calculator: as allowed by your teacher

Question 1 Customary Conversions (2 points)

- Convert 7 yards to feet. (1 point)
- Convert 4.5 pounds to ounces. (1 point)

Question 2 Smaller to Larger Units (2 points)

- Convert 96 inches to feet. (1 point)
- Convert 32 cups to gallons. (1 point)

Question 3 Metric Conversions (2 points)

- Convert 6.5 kilometers to meters. (1 point)
- Convert 480 centimeters to meters. (1 point)

Question 4 Ratio Table (2 points)

Copy and complete the ratio table for gallons and quarts.

Gallons	3	5		9
Quarts	12		44	

Three values are missing.

Question 5 Which Is Farther? (2 points)

Which distance is longer, 1.1 miles or 5,700 feet, and by how many feet?

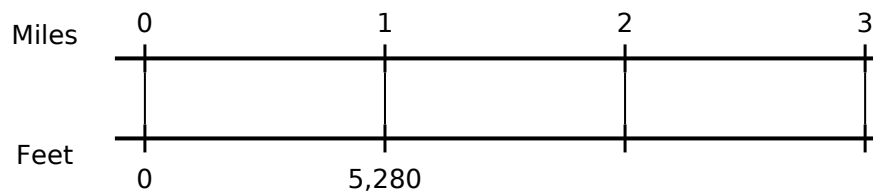
Question 6 Café Milk (3 points)

A café uses 36 cups of milk each day.

- How many quarts is that per day? (1 point)
- How many gallons does the café use in 7 days? (2 points)

Question 7 Double Number Line (3 points)

A trail marker uses a double number line for miles and feet.



Miles (top) and feet (bottom).

- Find the two missing values. (1 point)
- How many feet are in 3.5 miles? (2 points)

Question 8 Jar Shipment (3 points)

A shipping box holds 24 jars, and each jar weighs 18 ounces. The limit is 30 pounds.

- Find the total weight in ounces. (1 point)
- Find the total weight in pounds. (1 point)
- Is the box under the limit, and by how many pounds? (1 point)

Question 9 Milliliters to Liters (1 point)

Write 250 milliliters in liters.