

Grade 5 · Converting Units and Line Plots · Test

Common Core 5.MD.A.1, 5.MD.B.2 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

This test has 9 questions worth 20 points in all. Allow 45 minutes. Show your work for every conversion and write the unit with each answer. Questions cover converting customary and metric units and reading and making line plots with fractions.

Test information

- **Grade:** Grade 5
- **Chapter:** Converting Units and Line Plots
- **Common Core:** 5.MD.A.1, 5.MD.B.2
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 2 pts; Question 3: 2 pts; Question 4: 3 pts; Question 5: 2 pts; Question 6: 3 pts; Question 7: 2 pts; Question 8: 2 pts; Question 9: 2 pts)

Question 1: Customary conversions (2 points)

- Convert 8 yd to feet. (1 point)
- Convert 72 oz to pounds. Write the answer as a decimal. (1 point)

Question 2: Metric conversions (2 points)

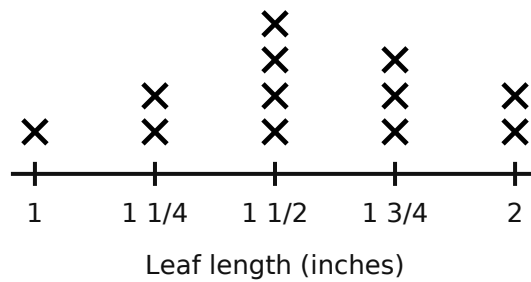
- Convert 6.4 m to centimeters. (1 point)
- Convert 9,500 g to kilograms. (1 point)

Question 3: Comparing amounts (2 points)

- Compare 2.5 qt and 9 c. Write which is greater. (1 point)
- Compare 1.2 km and 1,150 m. Write which is greater. (1 point)

Question 4: Reading a line plot (3 points)

Mei collected 12 leaves. The line plot shows the length of each leaf.



Lengths of 12 leaves.

- How many leaves are longer than $1\frac{1}{2}$ inches? (1 point)
- Find the difference between the longest and the shortest leaf. (1 point)
- Find the total length of the leaves that are $1\frac{1}{2}$ inches long. (1 point)

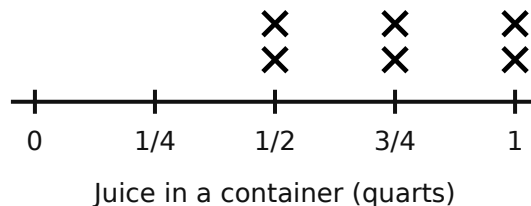
Question 5: Fence sections (2 points)

A fence has 4 sections. Each section is 2 yd 2 ft long.

- Find the total length of the fence in feet. (1 point)
- Write the total length in yards and feet. (1 point)

Question 6: Sharing juice equally (3 points)

At a school picnic, 6 containers hold different amounts of juice. The line plot shows the number of quarts in each container.

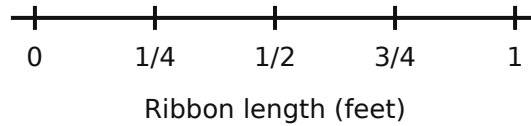


Juice in 6 containers.

- Find the total amount of juice. (1 point)
- The juice is poured back and shared equally among the 6 containers. How much is in each? (1 point)
- Write the amount in part (b) in cups. (1 point)

Question 7: Making a line plot (2 points)

Noah cut 7 pieces of ribbon. Their lengths in feet are $\frac{1}{4}, \frac{1}{2}, \frac{1}{2}, \frac{3}{4}, \frac{1}{4}, \frac{1}{2}, 1$.



Number line for the line plot.

- a. Make a line plot by drawing an X for each piece above the number line. (1 point)
- b. How many pieces are longer than $\frac{1}{4}$ foot? (1 point)

Question 8: Cooler for the team (2 points)

A Little League coach fills a 5-gallon cooler with water. There are 16 players, and each drinks 3 cups.

- a. How many cups of water does the cooler hold? (1 point)
- b. How many gallons are left after every player drinks? (1 point)

Question 9: Bike path (2 points)

A bike path is 3.2 km long. Mei has ridden 1,850 m.

- a. How many more meters must she ride? (1 point)
- b. Write the answer to part (a) in kilometers. (1 point)