

Grade 5 · Converting Units and Line Plots · Test Answer Key

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

This key gives the worked solution and the point scoring for each question. Award points for correct units as well as correct numbers. Total possible: 20 points.

Grade 5 Common Core: 5.MD.A.1 · 5.MD.B.2

Question 1: Customary conversions (2 points)

- a. $8 \times 3 = 24$. 24 ft
- b. $72 \div 16 = 4.5$. 4.5 lb

Scoring: 1 point for each correct conversion with the right unit.

Question 2: Metric conversions (2 points)

- a. $6.4 \times 100 = 640$. 640 cm
- b. $9,500 \div 1,000 = 9.5$. 9.5 kg

Scoring: 1 point for each correct conversion with the right unit.

Question 3: Comparing amounts (2 points)

- a. $2.5 \text{ qt} = 2.5 \times 4 = 10$ cups, and $10 > 9$. 2.5 qt **is greater**
- b. $1.2 \text{ km} = 1.2 \times 1,000 = 1,200$ m, and $1,200 > 1,150$. 1.2 km **is greater**

Scoring: 1 point for each correct comparison; the conversion must be shown or implied.

Question 4: Reading a line plot (3 points)

- a. Leaves longer than $1\frac{1}{2}$ in: three at $1\frac{3}{4}$ and two at 2, so $3+2=5$. **5 leaves**
- b. $2-1=1$. 1 in
- c. There are 4 leaves at $1\frac{1}{2}$ in: $4 \times 1\frac{1}{2} = 4+2=6$. 6 in

Scoring: 1 point for each correct part.

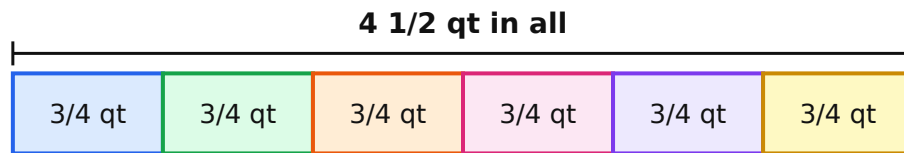
Question 5: Fence sections (2 points)

- a. One section: $2 \times 3 + 2 = 8$ ft. Four sections: $4 \times 8 = 32$. 32 ft
- b. $32 \div 3 = 10$ remainder 2. **10 yd 2 ft**

Scoring: 1 point for each correct part. Allow credit in part (b) from a correct part (a) value.

Question 6: Sharing juice equally (3 points)

- a. $\frac{1}{2} + \frac{1}{2} + \frac{3}{4} + \frac{3}{4} + 1 + 1 = 4\frac{1}{2}$. $4\frac{1}{2}$ qt
b. $4\frac{1}{2} \div 6 = \frac{9}{2} \times \frac{1}{6} = \frac{3}{4}$. $\frac{3}{4}$ qt
c. $\frac{3}{4} \times 4 = 3$. 3 c

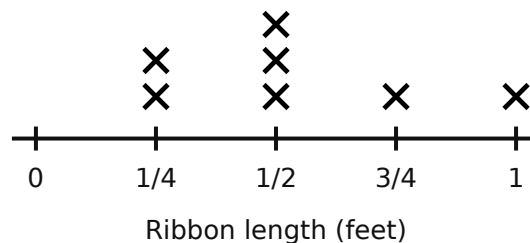


Six equal containers of $\frac{3}{4}$ quart.

Scoring: 1 point for each correct part.

Question 7: Making a line plot (2 points)

- a. Two X marks above $\frac{1}{4}$, three above $\frac{1}{2}$, one above $\frac{3}{4}$, and one above 1.



The completed line plot.

- b. $3 + 1 + 1 = 5$. **5 pieces**

Scoring: 1 point for a line plot with all 7 X marks in the correct places; 1 point for part (b).

Question 8: Cooler for the team (2 points)

- a. $5 \times 16 = 80$. **80 cups**
b. Used: $16 \times 3 = 48$ cups. Left: $80 - 48 = 32$ cups, and $32 \div 16 = 2$. **2 gallons**

Scoring: 1 point for each correct part.

Question 9: Bike path (2 points)

- a. $3.2 \times 1,000 = 3,200$ m. $3,200 - 1,850 = 1,350$. 1,350 m
b. $1,350 \div 1,000 = 1.35$. 1.35 km

Scoring: 1 point for each correct part.

Total
20 points