Customary Length Measurements Match

Convert each measurement. Write the letter of the correct measure.

1 mi = 1,760 yd

7.
$$yd = 219 \text{ ft}$$

11. Stretch Your Thinking Niko rides his bike 5,300 yards to his friend's house. About how many miles does Niko ride?

5,300 yards is about ____ miles.

12. Write Math Explain how you found your answer for Exercise 11.

Units of Capacity

Each triangle in the right column has two measurements that are equal to measurements given on a triangle in the left column. Match the triangles with equal measurements, and find the unknown measurement.

Customary Units of Capacity

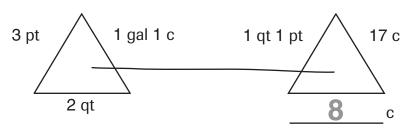
1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups

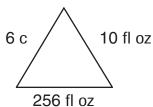
1 quart (qt) = 2 pints

1 gallon (gal) = 4 quarts

Example:

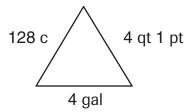


1.



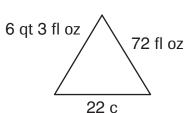
8 gal ___ gal ___ c

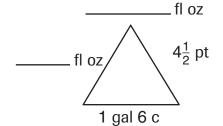
2.



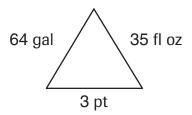
1,024 c 1 qt 3 fl oz

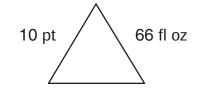
3.



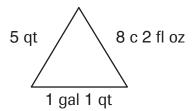


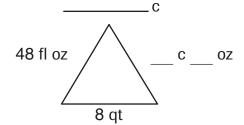
4.





5.





E83

Units of Weight

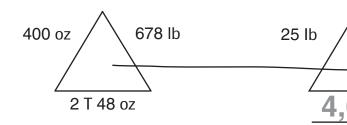
Each triangle in the right column has two measurements that are equal to measurements given on a triangle in the left column. Match the triangles with equal measurements, and find the unknown measurement.

Customary Units of Weight

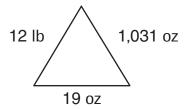
1 pound (lb) = 16 ounces (oz) 1 ton (T) = 2,000 lb

10.848 oz

Example:



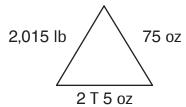
1.



1 T 15 lb ____ oz

64,005 oz

2.



6,017 lb 7 lb 96 oz

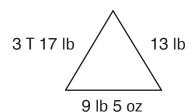
3.



_____0z

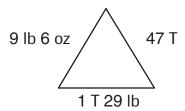
118 oz

4.



150 oz

5.



_____oz _____lb _____oz

1 lb 3 oz

94,000 lb

Adding and Subtracting Measures

Write each sum or difference in two ways. The first answer is given.

1. 3 ft 9 in. + 7 ft 5 in.

2.
$$2\frac{1}{2}$$
 yd $-1\frac{3}{4}$ ft

11 ft 2 in.; 134 in.

3. 9 mi 3,500 ft + 8 mi 1,990 ft

4. 9 yd 1 ft 11 in. – 4 yd 2 ft 8 in.

5. 8 lb 12 oz + 3 lb 6 oz

6. 6 T 400 lb - 4 T 1,000 lb

7. 12 gal 3 qt + 5 gal 2 qt

- **8.** 8 pt 3 fl oz 2 pt 9 fl oz
- **9. Write Math Explain** how you found the difference in Exercise 4.

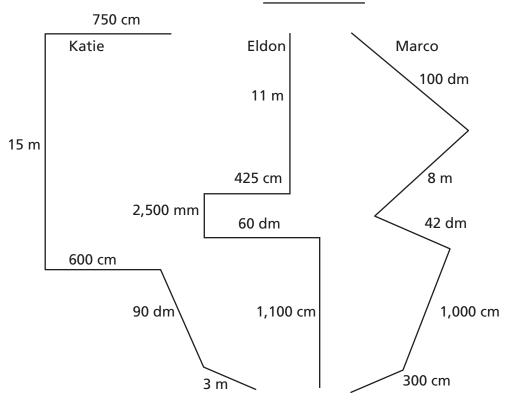
Metric Maze

Katie, Eldon, and Marco are taking different paths through the Metric Maze below. Follow each of their paths, and add to find the total distance each person travels. Then answer the questions below.

Metric Units of Length

1 meter (m) = 10 decimeters (dm) 1 dm = 10 centimeters (cm) 1 cm = 10 millimeters (mm)

STARTING LINE



FINISH LINE

- 1. Who has the shortest path to the Finish Line?
- 2. Who has the longest path to the Finish Line?
- **3. Write Math Explain** how you changed the units so that you could compare the lengths of the paths.

More Customary Units

The table below shows customary units of length and capacity that are sometimes used.

Units of Length	Units of Capacity
1 rod = 16.5 feet	1 fluid dram = $\frac{1}{8}$ fluid ounce
1 furlong = 40 rods	1 gill = 4 fluid ounces
1 mile = 8 furlongs	1 peck = 8 quarts
1 fathom = 6 feet	1 bushel = 4 pecks
1 league = 3 miles	1 tablespoon = $\frac{1}{2}$ fluid ounce
	1 teaspoon = $\frac{1}{3}$ tablespoon

Solve.

- 1. How many yards are in 1 rod? _____
- 2. How many feet are in 1 furlong? _____
- 3. How many furlongs are in 1,760 yards? _____
- 4. How many inches are in 1 fathom? ______
- **5.** How many miles are in 20,000 leagues? _____
- **6.** How many fluid drams are in 1 ounce? _____
- 7. How many gills are in 1 pint? _____
- 8. How many pints are in 1 peck? _____
- 9. How many quarts are in 3 bushels? _____
- 10. How many fluid drams are in 1 gill? _____
- **11.** How many teaspoons are in 1 tablespoon? _____
- **12.** How many tablespoons are in 1 gill? _____
- **13.** Write Math Explain how you solved Exercise 12.

What Time Is It?

Find the start, elapsed, or end time.

1. Start: 9:13 A.M.

Elapsed time: $9\frac{3}{4}$ hr

End time:

3. Start: 2:18:09 P.M.

Elapsed time: 5 hr 34 min 27 sec

End time: _____

5. Start: April 4

Elapsed time: 2 weeks 4 days

End time:

2. Start: 7:15 A.M.

Elapsed time:

End time: 1:22 P.M.

4. Start:

Elapsed time: 2 hr 27 min 53 sec

End time: 7:04:11 P.M.

End time: June 27

6. Start: June 1 Elapsed time: _____

7. Stretch Your Thinking Anne started working on her art project at 3:40 p.m. She worked for $1\frac{1}{2}$ hours. She took a 55 minute supper break. She claimed that if she worked 1 hour more, she could finish the project and meet her friends at the movies before 7:00 P.M. Is Anne correct? **Explain** how you know.

Write Math **Explain** how to find the elapsed time in Exercise 6.