

Name: _____

Period: _____

Date: _____

Math Unit 2: Fractions and Decimals**Lesson 2.4- Adding and Subtracting Decimals****SWBAT:****Paraphrase:****Essential Question:** How can you add and subtract decimals?

Example 1

a. Add $8.13 + 2.76$.**Estimate** $8.13 + 2.76 \approx 8 + 3 = 11$

Line up the decimal points.

$$\begin{array}{r} 8.13 \\ + 2.76 \\ \hline 10.89 \end{array}$$

Add as you would with whole numbers.

Reasonable? $10.89 \approx 11$ ✓b. Add $1.459 + 23.7$.

$$\begin{array}{r} 1 \\ 1.459 \\ + 23.700 \\ \hline 25.159 \end{array}$$

Insert zeros so that both numbers have the same number of decimal places.

Example 2

a. Subtract $5.508 - 3.174$.**Estimate** $5.508 - 3.174 \approx 6 - 3 = 3$

Line up the decimal points.

$$\begin{array}{r} 410 \\ 5.508 \\ - 3.174 \\ \hline 2.334 \end{array}$$

Subtract as you would with whole numbers.

Reasonable? $2.334 \approx 3$ ✓b. Subtract $21.9 - 1.605$.

$$\begin{array}{r} 9 \\ 810 \\ 21.900 \\ - 1.605 \\ \hline 20.295 \end{array}$$

Insert zeros so that both numbers have the same number of decimal places.

Your Turn

Add or subtract.

1. $4.206 + 10.85$

2. $15.5 + 8.229$

3. $78.41 + 90.99$

4. $6.34 - 5.33$

5. $27.9 - 0.905$

6. $18.626 - 13.88$

Example 3

Your meal at the school cafeteria costs \$3.45. Your friend's meal costs \$3.90. You pay for both meals with a \$10 bill. How much change do you receive?

Use a verbal model to solve the problem.

$$\begin{aligned} \text{amount of change} &= \text{amount given} - \left(\text{cost of your meal} + \text{cost of friend's meal} \right) \\ &= 10.00 - (3.45 + 3.90) && \text{Substitute values.} \\ &= 10.00 - 7.35 && \text{Add inside parentheses.} \\ &= 2.65 && \text{Subtract.} \end{aligned}$$

So, you receive \$2.65.

Your Turn

A binder at the store costs \$4.87. A pack of pens at the same store costs \$2.94. You pay for both the binder and pack of pens with a \$20 bill. How much change do you receive?

Example 4

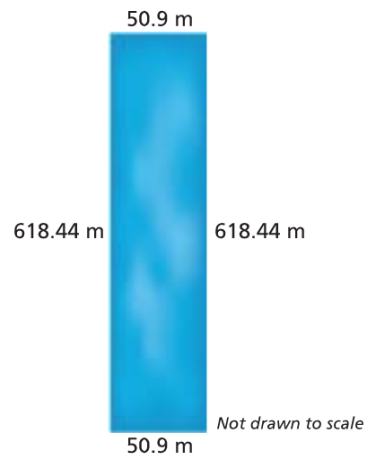
The Lincoln Memorial Reflecting Pool is approximately rectangular. Its width is 50.9 meters, and its length is 618.44 meters. You walk the perimeter of the pool. About how many meters do you walk?

Draw a diagram and label the dimensions.

Find the sum of the side lengths.

$$\begin{array}{r} 112 \\ 618.44 \\ 50.90 \\ 618.44 \\ + 50.90 \\ \hline 1338.68 \end{array}$$

So, you walk about 1339 meters.



Your Turn

Find the perimeter of the triangle.

