

2.4 Adding and Subtracting Decimals

1

ESSENTIAL QUESTION

How can you add and subtract decimals?

2

COMMON CORE STATE STANDARDS

6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

3

ADD AND SUBTRACT DECIMALS

1. Write the numbers vertically and line up the decimal points.
2. Bring the decimal point straight down.
3. Add or subtract as you would whole numbers.

4

EXAMPLE Adding Decimals

Add $8.13 + 2.76$

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

5

Add $1.459 + 23.7$

$$\begin{array}{r} 1 \\ 01.459 \\ + 23.700 \\ \hline 25.159 \end{array}$$

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EXAMPLE 2 Subtracting DecimalsSubtract $5.508 - 3.174$

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

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Subtract $21.9 - 1.605$

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

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On Your Own

Add or Subtract.

 $4.206 + 10.85$

$$\begin{array}{r} 4.206 \\ + 10.850 \\ \hline 15.056 \end{array}$$

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On Your Own

Add or Subtract.

 $6.34 - 5.33$

$$\begin{array}{r} 6.34 \\ - 5.33 \\ \hline 1.01 \end{array}$$

10

On Your Own

Add or Subtract.

 $15.5 + 8.229$

$$\begin{array}{r} 15.500 \\ + 8.229 \\ \hline 23.729 \end{array}$$

11

On Your Own

Add or Subtract.

 $78.41 + 90.00$

$$\begin{array}{r} 78.41 \\ + 90.00 \\ \hline 168.41 \end{array}$$

12

On Your Own

Add or Subtract.

$27.9 - 0.905$

$$\begin{array}{r} 27.910 \\ - 00.905 \\ \hline 26.995 \end{array}$$

13

On Your Own

Add or Subtract.

$18.626 - 13.88$

$$\begin{array}{r} 18.626 \\ - 13.880 \\ \hline 4.746 \end{array}$$

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EXAMPLE 3 Real-Life Application

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?

$$\begin{array}{r} 10.00 \\ - 7.35 \\ \hline 2.65 \end{array} \quad \begin{array}{r} (3.45 + 3.90) \\ 3.45 \\ + 3.90 \\ \hline 7.35 \end{array}$$

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You received \$2.65 in change.

EXAMPLE 4 Real-Life Application

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?



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

$$618.44$$

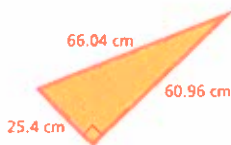
$$50.9$$

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You walk about 1339 meters

On Your Own

8. Find the perimeter of the triangle.



$$\begin{array}{r} 25.4 \\ 60.96 \\ + 66.04 \\ \hline 152.40 \end{array}$$

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The perimeter of the triangle is 152.40 cm.