

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

Warm Up

$$3. \frac{9}{11} + \frac{1}{11}$$

$$7. \frac{6}{19} + \frac{2}{3}$$

$$11. \frac{2}{11} + \frac{1}{2}$$

$$4. \frac{1}{3} + \frac{2}{17}$$

$$8. \frac{1}{3} + \frac{1}{6}$$

$$12. \frac{4}{11} + \frac{3}{8}$$

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

Warm Up Answers

$$3. \frac{9}{11} + \frac{1}{11} = \frac{10}{11}$$

$$7. \frac{6}{19} + \frac{2}{3} = \frac{56}{57}$$

$\frac{18}{57} + \frac{39}{57}$

$$11. \frac{2}{11} + \frac{1}{2} = \frac{15}{22}$$

$\frac{4}{22} + \frac{11}{22}$

$$4. \frac{1}{3} + \frac{2}{17} = \frac{23}{51}$$

$\frac{17}{51} + \frac{6}{51}$

$$8. \frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$$

←

$$12. \frac{4}{11} + \frac{3}{8} = \frac{65}{88}$$

$\frac{32}{88} + \frac{33}{88}$

$$\begin{array}{r} \cancel{4} \\ - \cancel{3}2 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 4 \frac{4}{11} = \cancel{4} \frac{3}{20} \\ - \frac{3}{11} \\ \hline \frac{3}{11} \end{array}$$

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

Lesson 2.4

November 12, 2014

Essential Question:

How can you add and subtract decimals?

Lesson Objective:

Students will be able to:

use a formal rule to add and subtract decimals.

Self-Evaluation Scale

Score	Description
4	I can teach other students how to use a formal rule to add and subtract decimals.
3	I can use a formal rule to add and subtract decimals.
2	I recognize, but still need help to use a formal rule to add and subtract decimals.
1	I do not know how to use a formal rule to add and subtract decimals.

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

Key Idea

Adding and Subtracting Decimals

To add or subtract decimals, write the numbers vertically and line up the decimal points. Then bring down the decimal point and add or subtract as you would with whole numbers.

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

$$3.82 + 5$$

$$\begin{array}{r} 5.00 \\ + 3.82 \\ \hline 8.82 \end{array}$$

1 Adding Decimals

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.

99.90

99.990

99.999

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

$$\begin{array}{r} 21.\overset{8}{9}\overset{9}{\cancel{2}0} \\ - 1.\overset{2}{6}0\overset{3}{3} \\ \hline \end{array}$$

Subtracting Decimals

a. Subtract $5.508 - 3.174$.

Estimate $5.508 - 3.174 \approx 6 - 3 = 3$

Line up the decimal points.

$$\begin{array}{r} \overset{410}{\downarrow} \\ 5.\overset{4}{5}\overset{0}{0}8 \\ - 3.174 \\ \hline 2.334 \end{array}$$

Subtract as you would with whole numbers.

Reasonable? $2.334 \approx 3$ ✓

b. Subtract $21.9 - 1.605$.

$$\begin{array}{r} \overset{9}{8}\overset{10}{\cancel{9}}\overset{0}{0} \\ 21.\overset{9}{9}\overset{0}{0}0 \\ - 1.605 \\ \hline 20.295 \end{array}$$

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

$$\begin{array}{r} 4.300 \\ + 8.976 \\ \hline 13.276 \\ 76 \end{array}$$

$$\begin{array}{r} 09 14 12 \\ \cancel{10} \cancel{3} \cancel{10} \\ - 3.698 \\ \hline 6.832 \end{array}$$

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

TOYO!

Add or subtract.

1. $4.206 + 10.85$

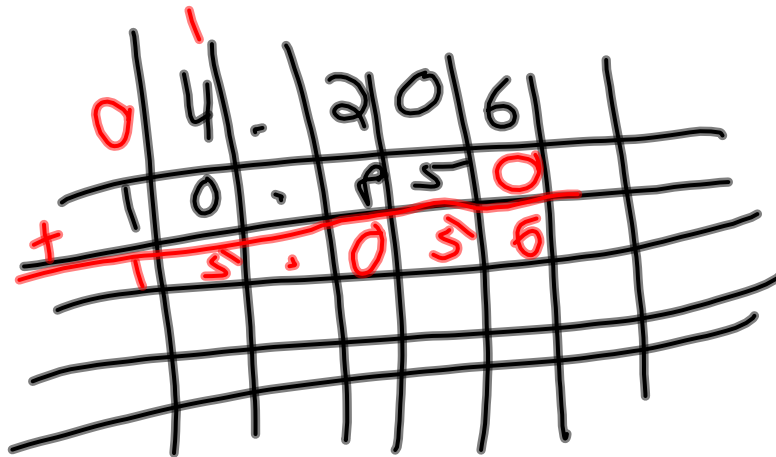
2. $15.5 + 8.229$

3. $78.41 + 90.99$

4. $6.34 - 5.33$

5. $27.9 - 0.905$

6. $18.626 - 13.88$



Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

Lesson 2.4

November 12, 2014

Essential Question:

How can you add and subtract decimals?

Lesson Objective:

Students will be able to:

use a formal rule to add and subtract decimals.

Self-Evaluation Scale

Score	Description
4	I can teach other students how to use a formal rule to add and subtract decimals.
3	I can use a formal rule to add and subtract decimals.
2	I recognize, but still need help to use a formal rule to add and subtract decimals.
1	I do not know how to use a formal rule to add and subtract decimals.

Learning Objective: Students will be able to use a formal rule to add and subtract decimals.

Homework

In your Big Ideas Record and Practice Journal
page 46.