

Warm-Up

Write each place value for

hundred tens ones . tenths hundredth thousandth ten thousandths

1) 138.1095

Write the following numbers

2) one hundred twenty-five thousandths

0.125

3) one hundred and two thousand fifteen ten-thousandths

100.2015

Round to place value

4) 125.068 (tenth)

125.1

5) 1998.01459 (hundredth)

1998.01

6) 251.9968 (tenth)

252.0

4.3 Adding and Subtracting Decimals

Step 1 Line Up the decimals

Step 2 May use zeros as placeholders
the +/-

Step 3 Bring down the decimal

Ex 1 Adding Decimal Numbers

a) 16.92 and 48.34

Does order matter?

No, commutative
property

$$\begin{array}{r} 16.92 \\ + 48.34 \\ \hline 65.26 \end{array}$$

b) $5.897 + 4.632 + 12.174$

$$\begin{array}{r} 4.632 \\ .5.897 \\ + 12.174 \\ \hline 22.703 \end{array}$$

Ex 2 Add Using a Zero as Placeholder

a) $7.3 + 0.85$

$$\begin{array}{r} 7.30 \\ + 0.85 \\ \hline 8.15 \end{array}$$

b) $6.42 + 9 + 2.576$

$$\begin{array}{r} 9.000 \\ + 6.420 \\ + 2.576 \\ \hline 17.996 \end{array}$$

Does Writing zeros to the right of decimal digits change its value? Explain.

Ex 3 Subtracting Decimal Numbers (and check)

a) 15.82 from 28.93

Does order matter?

Yes $2-1 \neq 1-2$

$$\begin{array}{r} 28.93 \\ - 15.82 \\ \hline 13.11 \end{array} \left. \vphantom{\begin{array}{r} 28.93 \\ - 15.82 \\ \hline 13.11 \end{array}} \right\} \begin{array}{l} + \\ \text{to} \\ \text{check} \end{array}$$

CHECK

$$\begin{array}{r} 15.82 \\ + 13.11 \\ \hline 28.93 \end{array} \checkmark$$

b) 146.35 minus 58.98

$$\begin{array}{r} 146.35 \\ - 58.98 \\ \hline 87.37 \end{array}$$

CHECK

$$\begin{array}{r} 87.37 \\ + 58.98 \\ \hline 146.35 \end{array} \checkmark$$

Ex 4 Writing Zeros as Placeholder to Subtract

a) 16.5 from 28.362

$$\begin{array}{r} 28.362 \\ - 16.500 \\ \hline 11.862 \end{array}$$

b) 12 less 5.83

$$\begin{array}{r} 12.00 \\ - 5.83 \\ \hline 6.17 \end{array}$$

CHECK

$$\begin{array}{r} 5.83 \\ + 6.17 \\ \hline 12.00 \end{array}$$

Ex 5 Estimating Decimal Answers (Use front end rounding)

a) add 19.42 and 6.825

Est.

$$\begin{array}{r} 20 \\ + 7 \\ \hline 27 \end{array}$$

Exact

$$\begin{array}{r} 19.420 \\ + 6.825 \\ \hline 26.245 \end{array}$$

b) subtract 1.8614 from 7.3

Est

$$\begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 7.3000 \\ - 1.8614 \\ \hline 5.4386 \end{array}$$

Exit Card- Find b , show all work

