

10-19-17

Aim: SWBAT add and subtract positive decimals.

HW: Finish WS & Textbook Pg. 764 # 1 - 16

Quiz next week (rounding, add and subtract)

Do Now: WS # 1 - 2

Name \_\_\_\_\_

**Extra Practice**  
(Lessons 3-1 and 3-2)

**Fractions and Decimals, Place Value and Metric Prefixes**

Write each decimal as a fraction or mixed numeral.

1. 82.4  $82\frac{4}{10}$     2. 0.005  $\frac{5}{1000}$     3. 3.9  $3\frac{9}{10}$     4. 0.025  $\frac{25}{1000}$   
 5. 25.002  $25\frac{2}{1000}$     6. 923.3  $923\frac{3}{10}$     7. 6.50  $6\frac{50}{100}$     8. 0.0125  $\frac{125}{10000}$

Write each of the following as a decimal and as a fraction.

9. eight thousandths 0.008,  $\frac{8}{1000}$   
 10. three and two hundredths 3.02,  $3\frac{2}{100} = \frac{302}{100}$   
 11. eighty-five thousandths 0.085,  $\frac{85}{1000}$   
 12. forty-five and nine tenths 45.9,  $45\frac{9}{10} = \frac{459}{10}$   
 13. six ten-thousandths 0.0006,  $\frac{6}{10000}$   
 14. seven hundred and three thousandths 700.003,  $700\frac{3}{1000} = \frac{700003}{1000}$

Write each number in expanded notation.

15. 0.013  $(0 \cdot 1) + (0 \cdot \frac{1}{10}) + (1 \cdot \frac{1}{100}) + (3 \cdot \frac{1}{1000})$   
 16. 62.175  $(6 \cdot 10) + (2 \cdot 1) + (1 \cdot \frac{1}{10}) + (7 \cdot \frac{1}{100}) + (5 \cdot \frac{1}{1000})$   
 17. 6.002  $(6 \cdot 1) + (0 \cdot \frac{1}{10}) + (0 \cdot \frac{1}{100}) + (2 \cdot \frac{1}{1000})$   
 18. 307.6005  $(3 \cdot 100) + (0 \cdot 10) + (7 \cdot 1) + (6 \cdot \frac{1}{10}) + (0 \cdot \frac{1}{100}) + (0 \cdot \frac{1}{1000}) + (5 \cdot \frac{1}{10000})$

Write each of the following as a decimal.

19.  $(5 \cdot 1000) + (4 \cdot 100) + (0 \cdot 10) + (7 \cdot 1)$  5,407  
 20.  $(6 \cdot 100) + (0 \cdot 10) + (5 \cdot 1) + (8 \cdot \frac{1}{10})$  605.8  
 21.  $(3 \cdot 10) + (8 \cdot 1) + (0 \cdot \frac{1}{10}) + (6 \cdot \frac{1}{100})$  38.06  
 22.  $(5 \cdot 10) + (9 \cdot 1) + (0 \cdot \frac{1}{10}) + (0 \cdot \frac{1}{100}) + (9 \cdot \frac{1}{1000})$  59.009  
 23.  $(2 \cdot 100) + (0 \cdot 10) + (8 \cdot 1) + (5 \cdot \frac{1}{10})$  208.5

~~Complete.~~

- ~~24. \_\_\_\_\_ hundredths = 1 one      25. 1 dekameter = \_\_\_\_\_ centimeters  
 26. \_\_\_\_\_ decimeters = 1 kilometer      27. \_\_\_\_\_ grams = 1 hectogram  
 28. 1 liter = \_\_\_\_\_ milliliters      29. \_\_\_\_\_ millimeters = 1 centimeter~~

Name \_\_\_\_\_

**Extra Practice**  
(Lessons 3-3 and 3-4)

**Rounding Decimals, Comparing Decimals**

Round each of the following to the nearest whole number.

ones place

1.  $615.813 \rightarrow 616$

2.  $213.904 \rightarrow 214$

3.  $86.399 \rightarrow 86$

4.  $6157.501 \rightarrow 6158$

5.  $753.18 \rightarrow 753$

6.  $32156.909 \rightarrow 32157$

Round each of the following to the nearest tenth.

7.  $67.314 \rightarrow 67.3$

8.  $86.704 \rightarrow 86.7$

9.  $853.76 \rightarrow 853.8$

10.  $32.8765 \rightarrow 32.9$

\*11.  $91.998 \rightarrow 92.0$  ←

12.  $54.876523 \rightarrow 54.9$

Round each of the following to the nearest hundredth.

Must leave a place holder in the place they ask you to round to.

13.  $54.317 \rightarrow 54.32$

\*14.  $6.1958 \rightarrow 6.20$  ←

15.  $113.6572 \rightarrow 113.66$

16.  $12.91199 \rightarrow 12.91$

17.  $81.91745 \rightarrow 81.92$

18.  $64.017562 \rightarrow 64.02$

Round each of the following to the nearest thousandth.

19.  $235.8587 \rightarrow 235.859$

\*20.  $810.8001 \rightarrow 810.800$

21.  $971.09090 \rightarrow 971.091$

\*22.  $2.199999 \rightarrow 2.200$

23.  $7089.34567 \rightarrow 7089.346$

\*24.  $0.000398 \rightarrow 0.000$

Round each of the following to the nearest cent.

hundredths place

25.  $\$5.875 \rightarrow \$5.88$

26.  $\$6.932 \rightarrow \$6.93$

27.  $\$54.679 \rightarrow \$54.68$

28.  $\$39.625 \rightarrow \$39.63$

\*29.  $\$154.999 \rightarrow \$155.00$

30.  $\$365.8009 \rightarrow \$365.80$

Fill in each blank with  $>$ ,  $<$ , or  $=$  to make a true sentence.

31.  $0.124 \geq 0.123$

32.  $5.79 \leq 57.9$

33.  $0.09 \geq 0.0899$

34.  $1\frac{5}{10} = 1.5$

35.  $0.005 \leq 0.05000$

36.  $973.5 \leq 983.4$

37.  $513.644 \geq 513.63999$

38.  $854.9176 \geq 853.9176$

39.  $9.654 \geq 9.5643$

40.  $19.817659 \leq 19.81769$

Name \_\_\_\_\_

Rounding

Answer ends in the place you were asked to round to.

Date \_\_\_\_\_

Period \_\_\_\_\_

Round each of the following to the specified place.

- |  |  |
|--|--|
| <p>1. 12.3756 Nearest Whole: <u>12</u></p> <p>12.3756 Tenth: <u>12.4</u></p> <p>12.3756 Hundredths: <u>12.38</u></p> <p>12.3756 Thousandths: <u>12.376</u></p> | <p>* 2. 29.9999 Nearest Whole: <u>30</u></p> <p>29.9999 Tenth: <u>30.0</u></p> <p>29.9999 Hundredths: <u>30.00</u></p> <p>29.9999 Thousandths: <u>30.000</u></p> |
|--|--|

- |   |   |
|---|---|
| <p>3. 140.1893 Nearest Whole: _____</p> <p>140.1893 Tenth: _____</p> <p>140.1893 Hundredths: _____</p> <p>140.1893 Thousandths: _____</p> | <p>4. 5.8989 Nearest Whole: _____</p> <p>5.8989 Tenth: _____</p> <p>5.8989 Hundredths: _____</p> <p>5.8989 Thousandths: _____</p> |
|---|---|

- |   |   |
|---|---|
| <p>5. 70.1256 Nearest Whole: _____</p> <p>70.1256 Tenth: _____</p> <p>70.1256 Hundredths: _____</p> <p>70.1256 Thousandths: _____</p> | <p>6. 0.9027 Nearest Whole: _____</p> <p>0.9027 Tenth: _____</p> <p>0.9027 Hundredths: _____</p> <p>0.9027 Thousandths: _____</p> |
|---|---|

- |   |   |
|---|---|
| <p>7. 10.0005 Nearest Whole: _____</p> <p>10.0005 Tenth: _____</p> <p>10.0005 Hundredths: _____</p> <p>10.0005 Thousandths: _____</p> | <p>8. 36.9009 Nearest Whole: _____</p> <p>36.9009 Tenth: _____</p> <p>36.9009 Hundredths: _____</p> <p>36.9009 Thousandths: _____</p> |
|---|---|

## Adding and Subtracting Decimals

- Align the decimal points.
  - Bring the decimal point down into the answer.
  - Add or subtract.
- 

## Multiplying Decimals

- Number with the most digits goes on top!
  - Align last digits.
  - Multiply.
  - Total the number of decimal digits the factors have.
  - Match the number of decimal digits in the answer with that total.
- 

## Dividing Decimals

- Move the decimal point on the outside number (divisor) until it's at the end.
- Move the decimal point on the inside (dividend) the same number of places.
- Bring the decimal point up into the quotient.
- Complete long division.

## Adding Decimals

- Always line up decimal points.

$$8.93 + 0.367 = 9.297$$

$$\begin{array}{r} 8.930 \\ + 0.367 \\ \hline 9.297 \end{array}$$

$$16.29 + 5.3 =$$

$$\begin{array}{r} 16.29 \\ + 5.3 \\ \hline 21.59 \end{array}$$

$$6 + 0.719 = 6.719$$

$$\begin{array}{r} 6.000 \\ + 0.719 \\ \hline 6.719 \end{array}$$

$$\begin{array}{r} 0.719 \\ + 6 \\ \hline \end{array}$$

*(Note: The above addition is crossed out with a large red X, indicating it is incorrect because the decimal points are not aligned.)*

## Subtracting Decimals

- Always line up decimal points.

$$8.91 - 2.745 = 6.165$$

$$\begin{array}{r} \overset{8}{8} \overset{10}{.9} \overset{10}{1} \\ - 2.745 \\ \hline 6.165 \end{array}$$

$$7.624 - 0.05 = 7.574$$

$$\begin{array}{r} \overset{5}{7} \overset{12}{.6} \overset{2}{2} \overset{4}{4} \\ - 0.050 \\ \hline 7.574 \end{array}$$

$$6. - 0.003 = 5.997$$

$$\begin{array}{r} \overset{5}{5} \overset{9}{.9} \overset{9}{9} \overset{10}{0} \\ - 0.003 \\ \hline 5.997 \end{array}$$

$$100 - 84.75 = 15.25$$

$$\begin{array}{r} \overset{9}{0} \overset{7}{0} \overset{9}{0} \overset{10}{0} \\ - 84.75 \\ \hline 15.25 \end{array}$$