

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. 615.813 616 2. 213.904 214 3. 86.399 86
4. 6157.501 6158 5. 753.18 753 6. 32156.909 32157

Round each of the following to the nearest tenth.

7. 67.314 67.3 8. 86.704 86.7 9. 853.76 853.8
10. 32.8765 32.9 *11. 91.998 92.0 ← 12. 54.876523 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 54.32 *14. 6.1958 6.20 ← 15. 113.6572 113.66
16. 12.91199 12.91 17. 81.91745 81.92 18. 64.017562 64.02

Round each of the following to the nearest thousandth.

19. 235.8587 235.859 *20. 810.8001 810.800 21. 971.09090 971.091
*22. 2.199999 2.200 23. 7089.34567 7089.346 *24. 0.000398 0.000

Round each of the following to the nearest cent.

hundredths place

25. \$5.875 \$5.88 26. \$6.932 \$6.93 27. \$54.679 \$54.68
28. \$39.625 \$39.63 *29. \$154.999 \$155.00 30. \$365.8009 \$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.

$$8.91 - 2.745 = 6.165$$

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

$$7.624 - 0.05 = 7.574$$

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

$$6. - 0.003 = 5.997$$

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

$$100 - 84.75 = 15.25$$

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