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Chapter 4 - Study Guide- Decimal Concepts \& Coordinate Grids

1. Write the decimal in words.
a.) 0.9 $\qquad$ nine tenths
b.) 4.19 $\qquad$ four and nineteen hundredths
c.) 2.092 two and ninety two thousandths
2. Write the decimal using numerals (numbers).
a.) forty-seven and twenty-three hundredths. $\qquad$
b.) seven hundred twenty-one thousandths. $\qquad$ 7.021
c.) seven and four hundredths. $\qquad$ 7.04
3. Make the following changes to the number 2.841
a) Make the 4 worth 100 times as much.
b.) make the 2 worth $\frac{1}{100}$ as much.
c.) Make the 8 worth $\frac{1}{100}$ as much.
d.) Make the 1 worth 100 times as much.

Write the new number: $\qquad$ 4.128

Write the new number in words: $\qquad$ four and one hundred twenty eight thousandths
4. Write greater than, equal to, or less than to make the number sentence true.
a.) 0.181 $\qquad$ less than 0.192
b.) 13.4 greater than 0.341
c.) 2.79 less than 2.97
d.) 0.362 less than 0.47
5. Shade the thousandths grid to represent the decimal. Then write the decimal in expanded form.
0.178

Expanded form: $0.1+0.07+0.008$

6. Shade the thousandths grid to represent the decimal. Then write the decimal in expanded form.
0.801

Expanded form: $0.8+0.001$

7. Round each number to the place listed.

| Start number | Nearest hundredth | Nearest tenth | Nearest whole number |
| :---: | :---: | :---: | :---: |
| 4.894 | 4.89 | 4.9 | 5 |
| 7.213 | 7.21 | 7.2 | 7 |
| 0.421 | 0.42 | 0.4 | 0 |

8. Explain how you rounded 0.421 to the nearest whole number.

The number in the tenths place tells us to leave the whole number as it is, so the nearest whole number is 0 .
9. Write the ordered pair for each point shown on the coordinate grid below.


D: $(9,5)$
E: $(1,3)$
F: $(6,6)$
G: 10,8 )
10. Shade the grid in one color to show the first addend. Shade the grid in a second color to show the second addend. Write the sum to complete the number sentence.
$0.64+0.28=0.92$

11. Shade the grid to show the starting number. Cross out or shade darker to show the number being taken away. Write the difference to complete the number sentence.
$0.79-0.56=0.23$

12. Alex is donating money to a pet adoption agency. His father has agreed to donate the same amount that Alex donates. The table below shows some of the possible amounts of money they may donate.
a.) Write the data in the table below as ordered pars.
b.) Plot the ordered pairs as points and use a straightedge to connect the points.

| Alex's <br> donation $(x)$ | Alex's father's <br> donation $(y)$ |
| :---: | :---: |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |


13. Make an estimate. Then solve and show your work. Use your estimate to check and see if your answer makes sense.

| a.) $\quad 2.3+8.7=11.0$ <br> Estimate: $\text { ate: } \frac{2+8=10}{12.3}+\frac{8.7}{11.0}$ | b.) $\begin{aligned} & 6.34+7.91=14.25 \\ & \text { Estimate: } \frac{6+8=14}{1} \\ & \frac{6.34}{14.25}\end{aligned}$ |
| :---: | :---: |
| c.) $11.2-5.8=$ 6.4 $\qquad$ <br> Estimate. $\begin{aligned} & \text { e. } \frac{11-6}{10}=5 \\ & \frac{01112}{5.8} \\ & \frac{5.4}{5} \end{aligned}$ | d.) $13.27-7.56=$ 5.71 $\qquad$ <br> Estimate: $\begin{aligned} & 13-8=5 \\ & \frac{13 \times 127}{017.126} \\ & \hline \frac{7.56}{5.71} \end{aligned}$ |

