## Dividing Decimals Study Guide

Here is a little reminder of what we learned this chapter. Please have your math workbook with you to look over some of these concepts as you study.

## 3 methods for division on page 147

- Place Value Sections uses boxes to help us organize our work
- Expanded Notation helps us visualize the different place values when dividing
- Digit-by-digit is the method most of us, but be careful to keep your numbers organized
- Please ask for graph paper during the test ifyou do not have small or neat handwriting! This will help you keep track of all your numbers.
- For practice: write the division problem and complete the work for problems 26, 27, and 28 on page 150

26. 
27. 
28. 

## Dividing by Two-Digit Whole Numbers

- Again, all 3 methods can be used to complete this division
- Remember, we used a trick to help us with this division. We rounded the divisor to an easier number to help us decide about how many times the divisor goes into the dividend.
- For practice: Complete the problems 5 and 6 on pages 152 below. It is ok to leave answers with a remainder.

5. 
6. 

Interpret Remainders on page 155-160

- Answers to division story problems can be written many ways:
- Ignore the Remainder example \#1 on pg. 155
- Round Up example \#2 on pg. 155
- Form a Fraction example \#3 on pg. 155
- Form a Decimal example \#4 on pg. 156
- Use the Remainder Only example \#5 on pg. 156
- For practice complete any unanswered story problems throughout pages 155160

Dividing with Decimals beginning on pg. 161

- When there is only a decimal in the dividend, simply divide like normal, carefully placing the decimal in the same spot in the quotient as it was in the dividend
- Division problems should no longer have a remainder as part of their quotient
- For practice complete problems $14-16$ on pg. 163 below

14. 
15. 
16. 

## Divide with Two Decimal Numbers on pg. 174

- Both the dividend and divisor must have the decimal shifted until there is a whole number being used as the divisor
- Multiply both numbers by $10,100,1,000$ etc. until the problem contains no 0 in its divisor
- See problems 17-19 on page 174 for practice
- Also see Puzzled Penguin in this section to test your understanding

17. 
18. 
19. 

Puzzled Penguin answer:

## Decimal Shifts

- Remember, dividing by a power of 10 is going to shift the decimal to become a larger quotient
- Dividing by a decimal is going to shift the decimal to the right, making your quotient become smaller.
- See problems on pg. 178 to practice putting this into words

