Name _____ Date _____

Place Value: Understanding to Round Decimals - Guided Lesson Explanation

Explanation#1

First, we look to see what is being asked of us.

"What is 7.1267 rounded to the nearest thousandth?"

Step 1) First, find the digit in the thousandths' place.

This is the place you want to round:

7.12**6**7

Now look one place to the right. If that digit is 5 or greater, round up. If the value is 4 or less, round down.

7.126**7**

7 is more than 5, so you will round up. Remove all the digits to the right of the thousandths' place:

7.126**7** → 7.127

Explanation#2

First, we look to see what is being asked of us.

Round 3.4383 to:

a) The nearest tens' place. b) The nearest hundred's place.

Step 1a) First, find the digit in the tenths' place.

This is the place you want to round:

3.**4**383

Now look one place to the right.

3. 4**3**83

Follow the same strategy: 5 or > = round up 4 or < = round down:

4 is less than 5, so you will not round up. Remove all the digits to the right of the tenths' place:

3.4**3**3 → 3.4

Step 1b) First, find the digit in the hundredths' place. This is the place you want to round:

3.4**3**83

Step 2b) Now look

one place to the right:

3.43**8**3

8 is more than 5, so you will round up. Remove all the digits to the right of the hundredths' place:

3.43**8**3 → 3.44

Explanation#3

First we look to see what is being asked of us.

Step 1) Round each number to the nearest whole number.

Step 2) 6.784 + 13.68414

7 + 14

7 and 6 is more than 5, so you will round down. 6.**7**84, 13.**6**8414

Now add:

7 + 14 = 21

The sum is about 21.

Step 3) Compare your estimate to the exact answer:

6.784 + 13.68414 = 20.46814