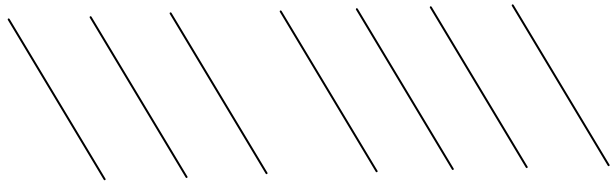
Rounding Decimal Numbers

Write the place value of each digit on the line below the digit.

7 6 4 . 9 8 5 4



1. Round 764 to the nearest ten._____

2. Round 764 to the nearest hundred._____

REMEMBER it is necessary to write zeros in the place of each whole number place value to the **right** of the rounded place.

To round decimals, you will use the same method as you did with whole numbers with one exception. The digits to the right of the given place value are dropped instead of being replaced by zeroes. If the digit to the right of the given place value is less than 5, drop that digit and all the digits to the right. If the digit to the right of the given place value is greater than or equal to 5, increase the number in the given place value by 1 and drop all digits to the right.

EXAMPLE "If the digit to the right of the place value is less than 5…" 62.52341 round to the nearest thousandth is 62.523

EXAMPLE "If the digit to the right of the place value is greater than 5…" 85.265 round to the nearest hundredth is 85.27

If the place to be rounded is to the right of the decimal point, there is **no** number after that place.

6.387 to the nearest tenth is 6.4.

(If we wrote 6.400 it would imply that the number was rounded to the nearest thousandth.)

If you are ever asked to round to the nearest whole number, you will round to the nearest **one's** place.

3. Round 75.846 to the nearest tenth._____

4. Round 63.962 to the nearest tenth._____

5. Round 63.962 to the nearest ones._____

6. Round 0.0841 to the nearest hundredth._____

7. Round 704.355 to the nearest hundredth._____

8. Round 0.00856374 to the nearest millionth._____

ANSWERS:

7 6 4 . 9 8 5 4 Notice there is only one ONES \h \t \o \t \h \t \t place. Every place on the \u \e \n \e \u \h \e right of the decimal point ends \n \n \e \n \n \o \n in "th".

\d \s \s \t \d \u \t
\r \h \r \s \h
\e \s \e \a \o
\d \d \n \u \s \t \d
\s
\h \t \a
\s \h \n
\s \d
\t
\h
\s

1. 760

2. 800

3. 75.8

4. 64.0 Ask about these if you can't tell when to use the zero and
5. 64 (Compare 4 and 5) when to drop it.

6. 0.08

7. 704.36

8. 0.008564