Study the following.

Review of division vocabulary.

$$\begin{array}{r} \text{quotient} \\ \text{divisor}\ )\ \overline{\text{dividend}} \end{array}$$

Write 2 examples of division problems, and label the three numbers.

Study the following.

Dividing a whole number into a decimal number is done as follows.

1. Write the decimal point for the quotient above the decimal point of the dividend.
2. Divide

Example:

$$\begin{array}{r} 2.12 \\ 4\overline{)\,8.48} \\ \underline{8} \\ 04 \\ \underline{4} \\ 08 \\ \underline{8} \\ 0 \end{array}$$

Divide the following.

1.

$5\overline{)1.86}$

2.

$8\overline{)82.4}$

3.

$4\overline{)65.12}$

4.

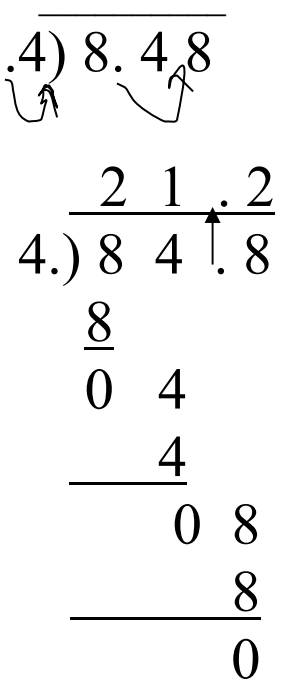
$3\overline{).762}$

Study the following.

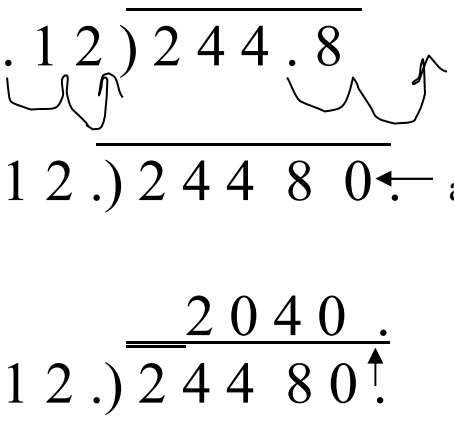
Dividing when the divisor is a decimal is done as follows.

1. Move the decimal point in the divisor over to the right all the way to the end of the number. Count the number of places you moved.
2. Move the decimal point in the dividend over to the right the same number of places. Add zeros on the right if needed to fill in the spaces up to the new decimal point.
3. Proceed as in the previous example.

Example:



Example 2:



Divide the following.

1.

$.4\overline{)8.448}$

2.

$.2\overline{)73.18}$

3.

$.6\overline{)9}$

4.

$.9\overline{)54}$

Study the following.

When dividing whole numbers or decimals, you sometimes get a decimal answer.

You divide until
A. there is no remainder, or
B. until you can round to the place value asked for.

Example with no remainder (Type A)

1. Start dividing.

2. If you get to the end of the dividend and still have a remainder, write in the decimal point for the dividend, and write it above in the quotient area.

3. Add a zero or zeros to the dividend and continue dividing until you get no remainder.

```
      4
5 ) 2 4          Start dividing.
    2 0
      4  <----   I still have a remainder

      4 .  <---  Add decimal points.
5 ) 2 4 .  <-
    2 0
      4

      4 . 8
5 ) 2 4 . 0  <-- Add a zero
    2 0
      4 0        Continue dividing
      4 0
        0        No remainder.
```

Divide until there is no remainder.

1.

$$4\overline{)\ 1}$$

2.

$$7\overline{)23}$$

3.

$$2\overline{)179}$$

4.

$$4\overline{)\ 3}$$

Study the following.

Example with rounding (Type B).

Divide and round to the nearest hundredth. $3\overline{)43}$

1. Divide as in the previous example.

2. Continue dividing to one more place value past the place value you are rounding to. (I am rounding to the nearest hundredth, so I divide to the thousandth place.

$$3\overline{)43.000} = 14.333$$

round to 14.33

Divide and round to the nearest tenth.

1. $3\overline{)17}$

2. $7\overline{)2}$

3. $9\overline{)274}$

4. $6\overline{)14}$

Divide the following.
Round to the nearest hundredth if needed.

1. $.3\overline{)4.731}$

2. $.12\overline{)14.4}$

3. $.8\overline{)16.31}$

4. $.9\overline{)392}$

5. $.2\overline{)3.451}$

6. $.3\overline{)61}$

If you skipped the section in the Changing Fractions to Decimals chapter where dividing decimals was necessary, go back and complete that section now.