Lesson 3: Understanding and Reading Decimals

Purpose of Lesson: You will read and write decimals up to the thousandths place.

Decimal: A number in which the whole is divided into ten**ths**, hundred**ths**, and thousand**ths**.

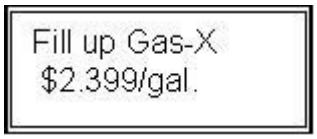
Mixed Decimal: Is a number that has a whole number as well as a decimal point included in it.

"The gas sign says $2.399 for regular! Wow, that's too high! "

"That dress only cost me $78.45! "

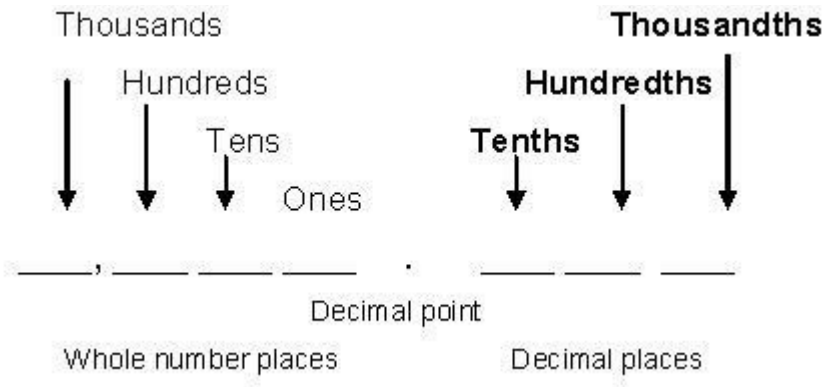
"My bank raised its interest rate to 1.2%."

"The weight on the chopped meat is 6.75 pounds; will that feed my family?"



We use decimals every day, but sometimes they may be hard to understand. Let's look at a place value chart that includes decimals.

We use decimal places to express values that are less than one whole number. Note that the decimal is to the right of the whole number.



Notice how similar the names are on each side of the decimal point. The **–ths** at the end of each decimal means that it is a part of a unit. The **value** of each digit can be found by using the chart. We know the dress costs $78.45. That's seventy-eight dollars and forty-five cents.

$ 7 8 . 4 5

There are 100 cents in a dollar.

One cent is one hundredth of a dollar. The 5 is worth **5 hundredths**, (.05) or 5 pennies.

The 4 is worth **4 tenths**, (.4) or 4 dimes. One dime is one tenth (.1) of a dollar.

What is the value of the *2* in 1.2%? *2 tenths*. 1 . **2**

The *5* in 6.75 is worth *5 hundredths* 6 . 7 **5**

The third place is the **thousandths** place, which has the very smallest value above. In the gas price of $2.399, the 9 is worth *9 thousandths.* That's nine tenths of a cent! One thousand parts are needed to make one whole.

That's very small! Did you notice that the more decimal places the smaller the value of the digits?

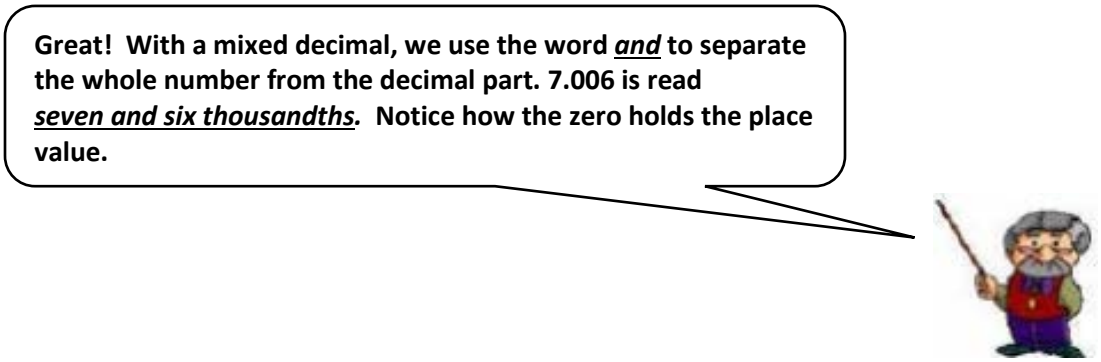
Take Lesson 3 Quiz 1

Reading decimals is easy! Just read it as though it were a whole number. Then give it the **decimal name** (use the place value chart) according to the number of decimal places. The **decimal name** is the word closest to the right.

For example: .75 is **seventy-five hundredths**, and .075 is **seventy-five thousandths**.

We know that .5 is **five tenths**, and did you know that .50 is **fifty hundredths**…and that they have the same value? Yes, decimals can be tricky! But think about it, five dimes (5 tenths = .5) is equal to fifty cents (.50).

Take Lesson 3 Quiz 2



Write decimals or mixed decimals in words.

Take Lesson 3 Quiz 3