

Two Ways to Write a Function

Let's review 3 different notations for functions
... starting with the function we just discussed.
We'll enter a price of \$350, and get a tax of \$42.

1st way to represent this function

We can represent this function as $T(p) = 0.12 \times p$

The tax, "T" for any given price "p" equals 0.12 times the price "p".

We can then substitute \$350 as the price and get a tax of \$42 for that price.

2nd way to represent this function

We can also represent this function as $f(x) = 0.12 \times x$.

f tells us there is a function involving x which equals 0.12 times x.

The tax, "f", for any given price, x equals 0.12 times x..

We can then substitute \$350 for x and get the \$42 tax amount for that price.

3rd way to represent this function

But we can also represent this function as " $y = 0.12 \times x$ "

The output, "y" equals 0.12 times the input "x".

The tax, y, equals 0.12 times the price, x.

These THREE notations are three different ways of saying the same thing.
Although we can choose any of these notations, once we choose a notation, it is important to remain consistent throughout our work. If we begin with T of p notation, we must first clearly define T and p, and then not change variables until we are at the end of the solution.

Activity

Play with the input or price slider.

Watch how the notation works.