

**Substituting Values Into Expressions : Static Version**

There are two methods for substituting values into expressions. The first one is accomplished by separately assigning values to the variables and then calculating the expression. The second method is accomplished by moving assignments via the mouse.

Here is the first method. It requires you to make statements active or "hot".



The first thing we are going to do is create some variables and assign values to them. Then we'll enter in some algebraic expressions. Finally, we'll calculate the expressions.

There are several things to keep in mind:

1) Parentheses will fix almost anything.

If you have trouble keeping the cursor where you want then enter in some parentheses.

2) Use the left and right arrow keys to get in and out of parentheses.

3) When the arrows don't work use the mouse to click your way in and out of parentheses.

4) The tab key will move around expressions also.



Here are some examples:



$x = 3$



$x + y + 2x + w + 3w$

$\triangle x + y + 2x + w + 3w = 4w + y + 9 \quad \text{Calculate}$



$y = 1$



$y + 3z + w - 4y - z$

$\triangle y + 3z + w - 4y - z = w + 2z - 3 \quad \text{Calculate}$



Now It's Your Turn... Follow the directions below to get hands on experience.

**1.**

Enter in the following definitions into their own statements:

$$w = 1, z = 3, w = 2, z = -1, w = 0, z = 2$$

Enter in the following expression into a statement:

$$(2 + w)(z^2 - w) + 2$$

What is the value of this expression when

a) $w = 1$ and $z = -1$

b) $w = 0$ and $z = 2$

c) $w = 2$ and $z = -1$