

Deleting the Bottom Step. If the program pointer is at the bottom step of memory, pressing **9** **DEL** deletes two steps in memory: the 100th step *and* the 99th step. When deleting the bottom step of a program, remember to reinsert the extra lost step.

Backstepping. If, using **SST**, you happen to overshoot the mark only slightly, you can use **9** **DEL** to recover. Simply backstep the program pointer by deleting the intervening steps, make the required insertion or deletion, and then reenter the deleted steps. This procedure is often easier than repositioning the pointer by other means.

Revising a Program

Now that you're familiar with the editing procedures, let's put that knowledge into practice with an example.

We'll take the volume of a sphere program and change it to calculate the area of a sphere ($r^2 \times \pi \times 4$). The two programs are very similar. Otherwise it wouldn't be feasible to change one to the other. Side by side they look like this:

Volume of a Sphere

LBL	}	Beginning of program.
A		
3	}	Calculates r^3 .
9		
y^x		
9	}	Times π .
π		
x		
4	}	Times 4.
x		
3		
÷	}	Divided by 3.
RTN		
RTN		End of program.

Area of a Sphere

LBL	}	Beginning of program.
A		
2	}	Calculates r^2 .
9		
y^x		
9	}	Times π .
π		
x		
4	}	Times 4.
x		
RTN		
RTN		End of program.

* These steps could be changed to **r¹** **y^x** or **ENTER** **x** to save space but it would have made this example more difficult to follow.

As you can see, there is little to change. Key in the sphere volume program now if you have not already done so by following this procedure:

1. Switch the calculator to W/PRGM mode.
2. Press **f** **PRGM** to clear program memory.
3. Key in the keystroke list on the left.
4. Switch back to RUN mode.

Use the following example to check your program before we edit it. **Example.** Find the volume of a sphere of radius 25.

Press

See Displayed

25 **A**

65449.85

In order to change the sphere volume program to a sphere area program, we need to make the following changes:

Volume of a Sphere

LBL	
A	
3	← Delete this step.
9	
y^x	
9	
π	
x	
4	
x	
3	← Delete this step.
÷	← Delete this step.
RTN	

Area of a Sphere

LBL	
A	
2	← Insert this step.
9	
y^x	
9	
π	
x	
4	
x	
RTN	