## Running the Program

To run the program, set the W/PRGM-RUN switch to RUN. Now find the volume of a sphere with a radius of 10.

**Press**          **See Displayed**

10 **A**          `4188.79`          Volume of the sphere.

When you pressed **A**, the program pointer searched through program memory from its current position until it found **LBL** **A**. Program execution then started from this point. If there had been no label A, the calculator would have begun execution at the top of memory. If you've just run the program in the above example, switch to W/PRGM mode. The display shows the code of the last instruction executed:

`24`

The **RTN** at the end of the program stops calculator execution, halts the stepping of the program pointer, and returns control to the keyboard.

If you now need to calculate the total volume of five spheres of radius 10, you can simply multiply your answer by 5. The program is not affected by any calculations you perform. Switch back to RUN mode and try it.

**Press**          **See Displayed**

10 **A**          `4188.79`          Volume of one sphere.

5 **×**          `20943.95`          Volume of five spheres.

Now switch again to W/PRGM mode. The display shows:

`71`

This is the keycode for multiply. Although the program pointer stays at **RTN**, the display shows the last key pressed during a calculation.

## Magnetic Cards

Now record your program on a magnetic card as you did in the introduction by:
1. Selecting a blank, unprotected *(unclipped)* magnetic card.
2. Switching to W/PRGM mode.
3. Passing the card through the right lower slot exactly as you did when entering a prerecorded program.

The position of the W/PRGM-RUN switch is very important when recording programs or using prerecorded cards. There is an easy way to remember which position the switch should be in for each use.

**To Record Your Own Program.** The switch belongs in the W/PRGM mode position. Think of it this way: In W/PRGM (write program) mode I *write* my programs onto the magnetic card.

**Prerecorded Programs.** The switch belongs in the RUN mode position. Remember it by saying to yourself: When I want to *run* a program from a prerecorded card I put the switch in RUN mode to read the card in.

### Read/Write Operations

Reading or writing a card records all 100 steps of the program memory. However, it does not change the contents of the registers, which enables you to utilize data developed by a prior program. If a read operation fails, program memory is cleared to **9** **NOP** codes and the display blinks. Reading a blank card will have the same effect.