Clearing Addressable Registers

f **REG** clears all nine addressable registers. Be sure these are cleared before doing storage register arithmetic.

Clearing Entire Calculator

The entire calculator can be completely cleared by turning the power switch OFF, then ON. When the power comes on, however, default programs for the functions corresponding to the window legends above the top row keys ($1/x$, $\sqrt{x}$, y^x , **R↓** , $x:y$) will be automatically placed in program memory.

Clearing Program Memory

f **PRGM** clears the HP-65's 100-step program memory but is effective only when the W/PRGM-RUN switch is in W/PRGM position. In RUN position, **f** **PRGM** has the same effect as **CLX** .

Display

The display is used to show results, operational errors, low battery condition, programs in execution, and in W/PRGM mode the display allows you to "see" each step of a program in memory (*this use of the display will be described in section 4*).

Setting Display

The HP-65 displays up to 15 characters: mantissa sign, 10-digit mantissa, decimal point, exponent sign, and 2-digit exponent. In RUN mode, the display shows a rounded version of the number in the X-register. Two display modes (*fixed and scientific notation*) with a variety of rounding options may be selected from the keyboard. (*Rounding options affect the display only; the HP-65 always maintains full accuracy internally.*)

Fixed Display. Fixed notation is specified by pressing **DSP** **·** followed by the appropriate number key to specify the number of decimal places (*0–9*) to which the display is to be rounded. Fixed notation allows all answers to be displayed with the same precision. The display is left-justified and includes trailing zeros within the selected setting. When the calculator is turned OFF,

then ON, it always reverts to fixed notation with the display rounded to two decimal places. For example:

Press	See Displayed
(*Make sure W/PRGM-RUN switch is set to RUN. Turn the calculator OFF, then ON.*)	0.00
123.4567	123.46
DSP **·** **4**	123.4567
DSP **·** **6**	123.456700
DSP **·** **2**	123.46
DSP **·** **0**	123.

Scientific Display. This is useful when you are working with large or very small numbers and allows answers to be displayed with the same number of significant digits. It is specified by pressing **DSP** followed by the appropriate number key to specify the number of decimal places to which the mantissa is rounded. Again, the display is left-justified and includes trailing zeros within the selected setting. For example:

Press	See Displayed	
(Turn the calculator OFF, then ON.)	0.00	
123.4567 **ENTER↑**	123.46	
DSP **2**	1.23 02	Equals 1.23 x 10².
DSP **4**	1.2346 02	Equals 1.2346 x 10².
DSP **8**	1.23456700 02	Equals 1.234567 x 10².

Next, set the display to show eight decimal places in fixed notation:

Press	See Displayed	
DSP **·** **8**	1.234567000 02	*Equals 1.23456700 x 10².

* If a number is too large to fit the specified display, the number is displayed in full (10 digit) scientific notation.