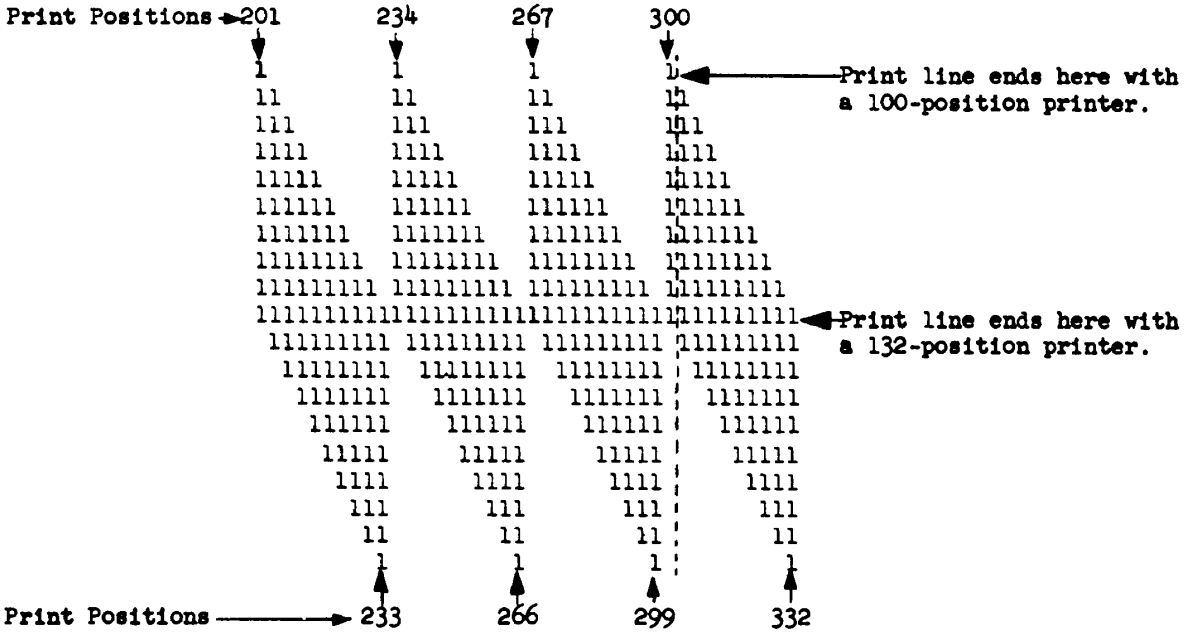
The program is executed in the following manner:

First, a lozenge (▯) is moved into all print positions. This lozenge will never print. It is used merely to have some character in every print position in addition to the word marks that are to be printed.

Word marks are then set in print positions 201, 234, 267, and 300 and a Print Word Mark instruction is executed. The position of the last word mark set (300) is then compared with 333. An unequal comparison sets four more word marks, this time in print positions 202, 235, 268, and 301 by adding 1001 to 201234 and 267300. The Print Word Mark instruction will now print eight word marks (201-202, 234-235, 267-268, 300-301). Thereafter, each unequal comparison will progressively add four more word marks in the print area until 132 word marks are printed on the 33rd line. When the position of the last word mark set is 333, an equal comparison results and the program branches to a group of instructions to begin clearing the word marks in a similar pattern, first in 201, 234, 267, and 300; then 202, 235, 268, 301; etc., until the last word mark in print position 332 is cleared. An equal comparison at this time signals the completion of the test. In the Clear Word Mark loops, a Print Word Mark & Branch instruction is executed instead of just Print Word Mark. A failure to branch will stop the machine.

The entire test may be repeated indefinitely by setting Sense Switch "D" to the ON position.

Checking Procedure

The results produced by this test will be a listing of "1's" (word marks) forming four parallelograms. The illustration below is a miniature sample. In the actual listing each print position will print the word mark on 33 successive lines providing a means of visually checking the vertical alignment.