

ACTIVITY 10.10

Start and Jump Numbers

To begin this activity, have students make a list of numbers beginning with 3 and skip counting by 5. The 3 is called the "start number" and 5 is the "jump number." It is helpful to make the list in a vertical column as in Figure 10.7. The task is to examine the list of numbers and find as many patterns as possible. Ideas should be shared with others in the class. Students should be sure that all suggested patterns really exist.

When students have found patterns for this first list, suggest that they change the start number and see how the patterns change. Different groups can explore different start numbers.

Next, make changes in the jump numbers. Jump-number changes will cause the patterns to change much more radically than a change in the start numbers.

FIGURE 10.7

Start with a number and list the numbers that occur by skip counting according to the "jump" number. How are the patterns for the same jump numbers alike? How are they different?

Start with 3 Jump by 5s	Start with 6 Jump by 5s	Start with 5 Jump by 4s	Start with 3 Jump by 4s	Start with 2 Jump by 3
3	6	5	3	2
8	11	9	7	5
13	16	13	11	8
18	21	17	15	11
23	26	21	19	14
28	31	25	23	17
33	36	29	27	20
38	41	33	31	23
43	46	37	35	26
48	51	41	39	29
53	56	45	43	32
...	...	...	...	...

From Van de Walle, J. A. & Lovin, L.H. (2006). *Teaching Student-Centered Mathematics Grades K – 3*. Toronto: Pearson Education, Inc. (p. 286).