

Numbers in Columns

Counting numbers are arranged in five columns: A, B, C, D and E.

A	B	C	D	E
1	2	3	4	5
10	9	8	7	6
11	12	13	14	15
		...	17	16

1 In which column will 75 appear?

Answer: _____

2 In which column will you find:

(a) 34? _____

(b) 61? _____

(c) 87? _____

(d) 92? _____

(e) 108? _____

3 In which row will you find:

(a) 34? _____

(b) 61? _____

(c) 87? _____

(d) 92? _____

(e) 108? _____

4 Can you identify and describe a pattern for the rows and columns to help you find where any number would be?

Answer: _____

The arrangement of counting numbers is changed to the following:

A	B	C	D	E
1		2		3
	5		4	
6		7		8
	10		9	
11		...		

5 Can you describe a pattern for the columns to help you find numbers in this arrangement?

Answer: _____

6 Do any of the numbers appear in the same column as they were in the first table?

Answer: _____

- 4 Answers will vary. For example, each ones place value amount is repeated in the same column. With the rows, numbers with the same tens place value appear in rows of threes, overlapping with the previous tens place value. Answer will again vary. For example, each ones place value amount is repeated in the same column.
- 6 Only numbers with 4 and 1 in their ones place are in the same columns as they were in the first table.
- (d) 92 is in the same row as 95.
 $95 \div 5 = 19$
 92 is in Row 19.
- (e) 108 is in the same row as 110.
 $110 \div 5 = 22$
 108 is in Row 22.

- 1 Numbers ending in 5 will always appear in Column E.
- 2 All numbers ending in 1 or 0 → Column A
 Ending in 2 or 9 → Column B
 Ending in 3 or 8 → Column C
 Ending in 4 or 7 → Column D
 Ending in 5 or 6 → Column E
- 3 (a) 34 is in the same row as 35.
 $35 \div 5 = 7$
 34 is in Row 7.
- (b) 61 is in the same row as 65.
 $65 \div 5 = 13$
 61 is in Row 13.
- (c) 87 is in the same row as 90.
 $90 \div 5 = 18$
 87 is in Row 18.

Answers: