

# On the Subject of Creating Simple Coordinate Systems

Coordinate creation causes confusion commonly.

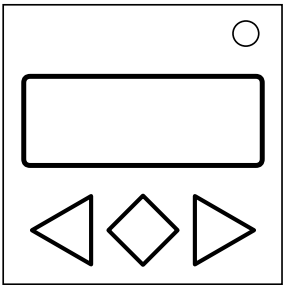


Table 1: grid size formats

Format	How to interpret											
<i>n</i>	9	3×3	15	5×3	21	7×3	25	5×5	35	7×5	49	7×7
( <i>n</i> )	9	3×3	15	3×5	21	3×7	25	5×5	35	5×7	49	7×7
<i>w</i> × <i>h</i>	<i>w</i> is the width, <i>h</i> the height of the grid.											
<i>h</i> by <i>w</i>	<i>h</i> is the height, <i>w</i> the width of the grid.											
<i>n</i> * <i>h</i>	<i>n</i> is the total size of the grid, <i>w</i> = <i>n</i> ÷ <i>h</i> .											
<i>n</i> : <i>w</i>	<i>n</i> is the total size of the grid, <i>h</i> = <i>n</i> ÷ <i>w</i> .											

Table 2: grid location formats

[ <i>c</i> , <i>r</i> ]	Top-left is [0,0].	<i>c r</i> <small>letter number</small>	Top-left is A1.
< <i>r</i> , <i>c</i> >	Top-left is <0, 0>.	<i>r</i> , <i>c</i>	Top-left is 1, 1.
( <i>c</i> , <i>r</i> )	Bottom-left is (0,0).	<i>c-r</i> <small>letter-number</small>	Bottom-left is A-1.
" <i>r</i> , <i>c</i> "	Bottom-left is "0, 0".	<i>r/c</i>	Bottom-left is 1/1.
[ <i>x</i> ]	Traverse right then down <sup>[1]</sup> ; Top-left is [0].	<i>xth</i>	Traverse right then down <sup>[1]</sup> ; Top-left is 1st.
# <i>x</i>	Traverse right then up <sup>[2]</sup> ; Bottom-left is #1.	四十七	Traverse down then left <sup>[3]</sup> ; top-right is 一.

Table 3: Chinese numerals

一	1	二	2	三	3	四	4	五	5
六	6	七	7	八	8	九	9	十	10

[1] Scanline order, also known as reading order, starts at the top-left, moves right across the row, and then continues likewise with each row from top to bottom.

[2] Cartesian order, also known as geometric order, starts at the bottom-left, moves right across the row, and then continues likewise with each row from bottom to top.

[3] Traditional Chinese reading order starts at the top-right, moves down the column, and then continues likewise with each column from right to left.