On the Subject of Creating Coordinates

Coordinate creation causes confusion commonly.

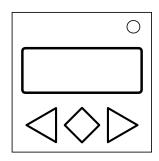


Table 1: grid size formats

| Format | How to interpret | | | | | | | | | | | |
|--------|---|-----|----|-----|----|-----|----|-----|------------|-----|----|-----|
| n | 9 | 3×3 | 15 | 5×3 | 21 | 7×3 | 25 | 5×5 | 3 5 | 7×5 | 49 | 7×7 |
| (n) | 9 | 3×3 | 15 | 3×5 | 21 | 3×7 | 25 | 5×5 | 3 5 | 5×7 | 49 | 7×7 |
| w×h | w is the width, h the height of the grid. | | | | | | | | | | | |
| h by w | h is the height, w the width of the grid. | | | | | | | | | | | |
| n*h | n is the total size of the grid, $w = n \div h$. | | | | | | | | | | | |
| n: w | n is the total size of the grid, $h = n \div w$. | | | | | | | | | | | |

Table 2: grid location formats

| [c,r] | Top-left is [0,0]. | C T letter number | Top-left is Al. |
|----------------|--|----------------------|--|
| <r, c=""></r,> | Top-left is <0, 0>. | r, c | Top-left is 1, 1. |
| (c,r) | Bottom-left is (0,0). | C-r letter-number | Bottom-left is A-l. |
| "r, c" | Bottom-left is "0, 0". | r/c | Bottom-left is 1/1. |
| (x) | Traverse right then down ^[1] ; Top-left is [0]. | <i>x</i> th | Traverse right then down ^[1] ; Top-left is lst. |
| #x | Traverse right then up ^[2] ; Bottom-left is #1. | 四十七 | Traverse down then left[3]; top-right is —. |

Table 3: Chinese numerals

| _ | 1 | 11 | 2 | 111 | 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.