Brackets, tables and Arrays
Brackets:

$$(x+1)$$

$$3[x^2+5x-6]$$

$$\{a,b,v\}$$

$$\$12.556$$

Size of brackets:

$$3(\frac{x}{y})$$

$$3\left(\frac{x}{y}\right)$$

$$3\left[\frac{x}{y}\right]$$

$$3\left\{\frac{x}{y}\right\}$$

$$|x|$$

$$\left|\frac{x}{y}\right|$$

$$\left\{x^3\right.$$

$$\left|\frac{dy}{dx}\right|_{x=3}$$

Note: To have either one of the bracket, replace the not needed one with period symbol ”.”

$$\left.\frac{dy}{dx}\right|_{x=3}$$

Table:
c : shows center aligned, number of ’c’ shows no. of columns.
& is used to signify change of column.
”linebreak” command is used to tell new row.
”hline” is used to draw horizontal line
” | ” in between ’c’ is used to draw vertical line.

| $x$ | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| $f(x)$ | 10 | 12 | 14 | 16 | 18 |

Arrays: Not aligned

$$y = x^2 + 5x - 6 \tag{1}$$
$$A = \pi r^2 \tag{2}$$
$$perimeter = 2\pi r \tag{3}$$
$$vol = \pi r^2 h \tag{4}$$

aligned with = symbol

$$\begin{aligned} y &= x^2 + 5x - 6 && (5)\\ A &= \pi r^2 && (6)\\ perimeter &= 2\pi r && (7)\\ vol &= \pi r^2 h && (8) \end{aligned}$$

without equation number

$$\begin{aligned} y &= x^2 + 5x - 6\\ A &= \pi r^2\\ perimeter &= 2\pi r\\ vol &= \pi r^2 h \end{aligned}$$