## Subsitite graph function

## Example

Use substitute graph function to see how the shape of the graph changes when different numbers are substituted for the variable.

Before carrying out the following operation, press the reset switch located on the back of the unit and press CL ENTER keys (caution: previously entered equations and memory will be erased).

Key Operation



51 ENTER

$7 \boldsymbol{x}$ ENTER


5 ENTER



## Notes

Specify Rect mode on the screen.


Enter the graph equation " $\mathrm{AX}{ }^{3}+\mathrm{BX}^{2}+\mathrm{C}^{\prime}$ " at Y 1 .

Specify substitute graph mode.
P As shown, the left of the screen shows the graph coordinate and the right of the screen shows that input of the variable used in the equation is being awaited.

Substitute 1 for variable A.
( 0 n left of screen the graph " $\mathrm{Y}=1 \mathrm{X}^{3}$ " is displayed. B and C are presumed to be " 0 " as numbers have not been entered.)

Substitute1 for variable B.
(On left of screen the graph
" $\mathrm{Y}=1 \mathrm{X}^{3}+1 \mathrm{X}^{2}$ " is displayed. C is pre-
sumed to be "0" as numbers have not been entered).

Substitute -5 for variable C.
( 0 n left of screen the graph
" $\mathrm{Y}=1 \mathrm{X}^{3}+1 \mathrm{X}^{2}-5$ " is displayed. Thus all variables are substituted with numbers.)

Alter the numbers for variable $B$ from 1 to 3 and view the changes in the graph. (The graph equation is $\left.Y=1 X^{3}+3 X^{2}-5\right)$.

Similarly, alter the numbers for variable A from 1 to 0.5 and view the changes in the graph.
(The graph equation is
$\mathrm{Y}=0.5 \mathrm{X}^{3}+3 \mathrm{X}^{2}-5$ ).

