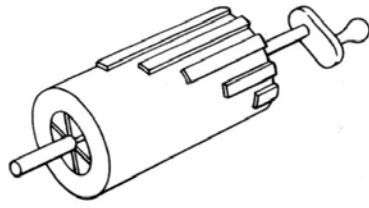
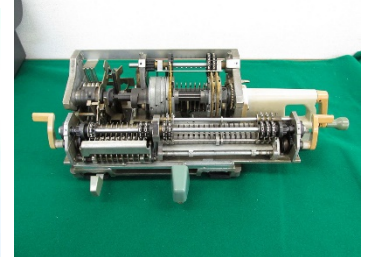
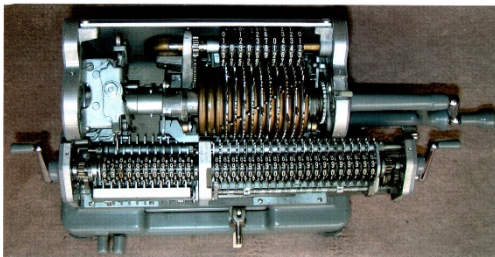


6 Calculator (2) (Digital)



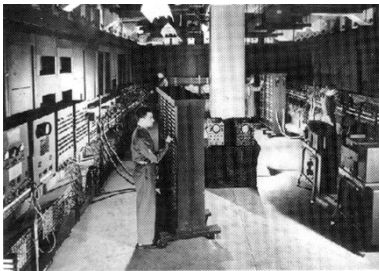
Calculator using gears with steps by Leibniz (around 1700)

(S.Ohkoma, A history of computer development, Kyoritsu Pub. (2005))



Mechanical digital calculator (around 1960)

Model to show the principle



最初のコンピューターとされる「ENIAC」

ENIAC (1946)



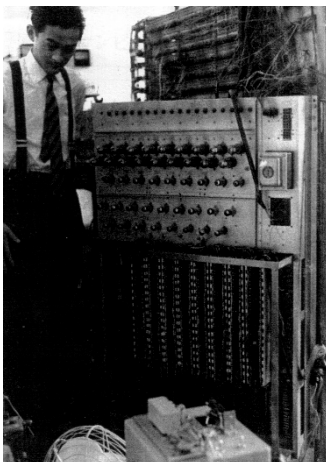
Transistor calculator (1963)

Hayakawa electric (now Sharp)

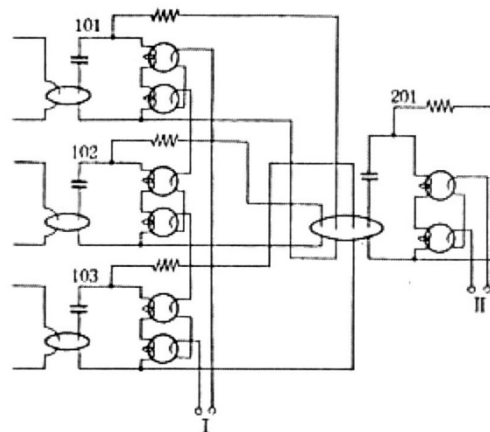


Ten key transistor calculator (1964)

Canon "Canola 130"



E.Goto



Parametron computer (1971)

101	102	103	Drive to 201	Oscillation phase of 201	
-1	-1	-1	-3k	-1	AND
-1	+1	-1	-1k	-1	
+1	-1	-1	-1k	-1	
+1	+1	-1	+1k	+1	OR
-1	-1	+1	-1k	-1	
-1	+1	+1	+1k	+1	
+1	-1	+1	+1k	+1	
+1	+1	+1	+3k	+1	