

# HP graphing calculator comparison



	hp 9g	hp 39g+	hp 48gII	hp 49g+
<b>purpose</b>	scientific and programmable graphing calculator for jr. high school and non-math students	graphing calculator for math students	graphing calculator for engineering students & professionals	graphing calculator for math, science and engineering students & professionals
<b>physical features</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
display type	pixel	pixel	pixel	pixel
CPU		75Mhz ARM9	48Mhz ARM9	75Mhz ARM9
display size	32 x 36 pixels + 2 lines + indicators	131 x 64 pixels	131 x 64 pixels	131 x 80 pixels
IR port		IrDA	IrDA	IrDA
serial port		USB	RS232	USB
expansion port				•
additional applications available on Internet		•	•	•
<b>operating features</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
entry logic	algebraic	algebraic	algebraic/RPN/textbook	algebraic/RPN/textbook
menus, prompts	•	•	•	•
alpha messages	•	•	•	•
soft-keys		•	•	•
numeric precision—intermediate/internal	24 digits	15 digits internal/rounded to 12 for display	15 internal/12 display/infinite precision for integers	15 internal/12 display/infinite precision for integers
numeric precision—displayed	10 digits	12 digits	12 digits	12 digits
numeric precision—displayed exponent	±99	±499	±499	±499
<b>configuration</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
flash ROM (allows for future electronic software upgrades*)				•*
memory	26 variables + 400 programming steps + 30 statistical samples	256K	128K	512KB + 0.8M
redefinable menu keys			•	•
redefinable keyboard (user mode)			•	•
peripherals		•	•	•
supports applets		•		
supports libraries/RPL programs			•	•
<b>vector operations</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
rectangular/polar			•	•
matrix operations		•	includes symbolic matrices	includes symbolic matrices
matrix editor		•	•	•
<b>graphing features</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
2-D function, polar, parametric plot	function	•	•	•
sequence; cobweb, stairstep plot	2-D functions	•	•	•
plot/table screen, box whisker plot		•		
3-D differential equation, bar plot		•	•	•
histogram, scatter plot			•	•
find: intersect, extremum, slope, area		•	•	•
zoom, trace, co-ordinates, shade	•	•	•	•
<b>math features</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
+ , * , ÷ , √ , / , x , = , / , ln , e <sup>x</sup> , x <sup>√y</sup>	•	•	•	•
y <sup>x</sup> , LOG , 10 <sup>x</sup> , x <sub>↓</sub> , % , Π , n!	•	•	•	•
fractions	•	•	•	•

\*A PC with an internet connection is required. Please purchase separately. USB cable included. HP makes no representation that a future upgrade will be available.

<b>math features</b> (continued)	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
degrees, radians, or grads mode	•	•	•	•
trigonometric functions/ inverses	•	•	•	•
hyperbolics/inverses	•	•	•	•
HP Solve application (root finder)		•	•	•
numeric integration		•	•	•
symbolic integration		•	•	•
numeric differentiation		•	•	•
symbolic differentiation		•	•	•
complex number functions		•	•	•
polynomial root finder, Taylor series		•	•	•
absolute value, round	•	•	•	•
integer & fractional part of a number	•	•	•	•
modulo function, floor, ceiling		•	•	•
CAS system			•	•
<b>scientific features</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
decimal hrs/hrs min sec conversions	•	•	•	•
polar/rectangular conversions	•	•	•	•
angle conversions		•	•	•
base conversions and arithmetic	•		•	•
unit conversions	•		•	•
bit, Boolean graphics			•	•
display and printer graphics			•	•
built in equation library			•	•
<b>statistical features</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
$\Sigma x, \Sigma x^2, \Sigma y, \Sigma y^2, \Sigma xy$	•	•	•	•
sample standard deviation, mean	•	•	•	•
population standard deviation	•	•	•	•
linear regression	•	•	•	•
combinations, permutations	•	•	•	•
weighed mean	•	•	•	•
edit, save, name, list		•	•	•
curve fit (LIN, LOG, EXP, POW)	•	•	•	•
plot statistical data		•	•	•
hypothesis tests		•	•	•
confidence intervals		•	•	•
<b>other features</b>	<b>hp 9g</b>	<b>hp 39g+</b>	<b>hp 48gII</b>	<b>hp 49g+</b>
root finder		HP Solve	HP Solve	HP Solve
number of steps/regs or bytes	400	256KB	128KB	1.5 MB
expandable memory				•
number of programs/formulae	10	++	++	++
levels of subroutines		++	++	++
branching	•	•	•	•
flags			256	256
alpha prompts in programs	•	•	•	•
input forms, alpha string manipulation		•	•	•
indirect addressing	•		•	•
index looping	•	•	•	•
alpha listing	•	•	•	•
finance functions			TVM/amort	TVM/amort