

PolySmlt – the Smlt bit

PolySmlt is one of the APPS you are allowed to have installed on your calculator. If you cannot see it in the list when you press APPS then either ask your teacher or download it from http://education.ti.com
It is made up of two parts: Poly for solving polynomials (see separate sheet) and Smlt (covered here) for solving simultaneous equations.

Starting PolySmlt

MSSM (#16(0)) 1: Finance 2: Ct19Help 98PolySm1t 4: SmartPad 5: TestGrd2	TEXAS INSTRUMENTS Poly Root Finder and Simultaneous Equ Solver version 1.0 PRESS ANY KEY © 2001 TEXAS INSTRUMENTS	OFTORM DIST. GPO14 Root Finder 2: Simult Ean Solver 3: About 4: Po14 Help 5: Simult Help 6: Quit Po14 Smit	SACHMANIANAUSS Number Of Eans = Number Of Unknowns = MAIN LOAD
TI I COO I'M I OIT OCICCE I OITOITIE	The welcome screen; press any key to proceed to	the main menu. Select "2" to go to	the simultaneous equation solver.

Using PolySmlt

When you have two	7y = 23 - 2x	2x = y - 4	x+2y-z=8
equations and two variables.	5x = y - 2	y+x=5	2x-3y+2z=5
eg:			x - y + z = 5
Rearrange both the	2x + 7y = 23	2x - y = -4	Note: This example is actually
equations so they are of the	5x - y = -2	x+y=5	three equations with three
form $a x + b y = c$	0 W y 2	W T y	unknowns. Such problems often occur in vectors.
Tell PolySmlt how many	STRULT FOR SHOVER	STATULT FOR SOLVER	SOMULT SOUSOLVES
equations and unknowns you	Number OfEans =2	Number Of Eans =2	Number Of Eans =3
have	Number Of Unknowns =2	Number Of Unknowns =2	Number Of Unknowns =3
	MAIN LOAD	MAIN LOAD	MAIN LOAD
and then enter a, b and c	SYSMATRIX (2×3)	SYSMATRIX (2×3)	SYSMATRIX (3×4)
for all your equations. Note: Make sure you use the	[2	[2 -1 -4] [1 1 S]	[1 2 -1 B] [2 -3 2 5] [1 -1 1 SEE]
negative 🕒 key rather than	s s=-0	2,3=5	3,4=5
the subtract one $oldsymbol{-}$.	2,3=-2 Main new cur uoad souve	MAIN NEH CLR LOAD SOLVE	MAIN NEW CLR LOAD SOLVE
Press GRAPH (under "Solve"	Solution	Solution	Solution
in the menu at the bottom of the screen) and there are	×1 8. 2432432432 ×2=3.216216216	×1 8. 3333333333 ×2=4.666666667	x1 B4 x2=5 x3=6
your answers. Note: X_1 is X_2 is Y etc			
, - ,	MAIN BACK STOSYS STOX	MAIN BACK STOSYS STOX	MAIN BACK STOSYS STOX