

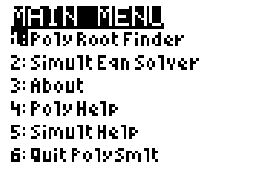
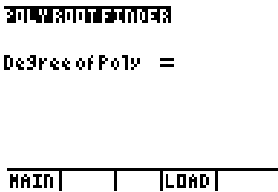


PolySmlt – the Poly bit

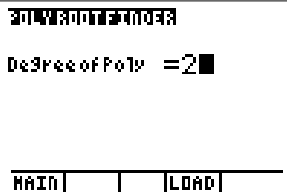
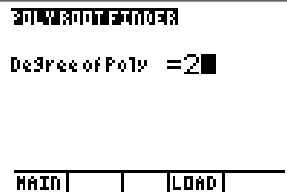
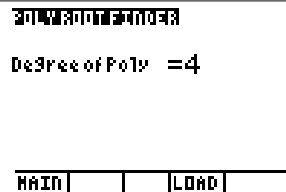
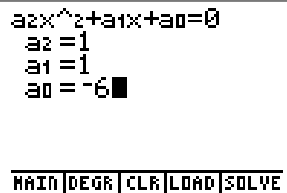
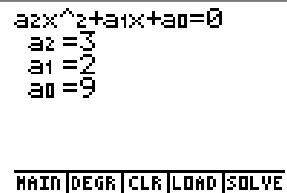
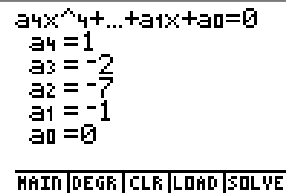
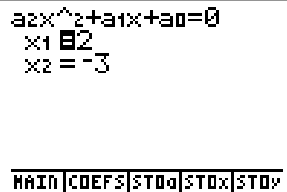
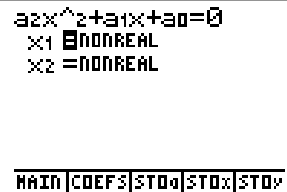
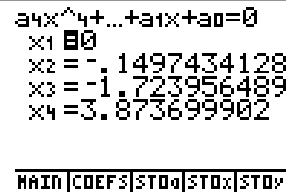
PolySmlt is one of the APPS you are allowed to have installed on your calculator. If you cannot see it in the list when you press **[APPS]** then either ask your teacher or download it from <http://education.ti.com>

It is made up of two parts: Poly for solving polynomials (covered here) and Smlt (see separate sheet) for solving simultaneous equations.

Starting PolySmlt

 <p>Press [APPS], select PolySmlt and press [ENTER]</p>	 <p>The welcome screen; press any key to proceed to....</p>	 <p>... the main menu. Select "1" to go to....</p>	 <p>... the polynomial root finder.</p>
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Using PolySmlt

<p>When you have a polynomial equation in one variable, eg:</p>	$(x-1)(x+2)=4$	$3x^2+4x+5=2x-4$	$x^2(x^2-7)=x(2x^2+1)$
<p>Rearrange the equation so that it is of the form $ax^2+bx+c=0$</p>	$x^2-x+2x-2=4$ $x^2+x-6=0$	$3x^2+2x+9=0$	$x^4-7x^2=2x^3+x$ $x^4-2x^3-7x^2-x=0$
<p>Tell PolySmlt the degree of the polynomial – this is the highest power of x....</p>			
<p>... and then enter the coefficients (a, b and c etc) for all the terms of your equation. Note: Make sure you use the negative [(-)] key rather than the subtract one [=].</p>			
<p>Press [GRAPH] (under "Solve" in the menu at the bottom of the screen) and there are your answers.</p>		 <p>Note: "nonreal" means that the root does not exist, ie the curve does not cross the x-axis, $b^2-4ac < 0$</p>	 <p>Remember to round your answers to 3 significant figures.</p>