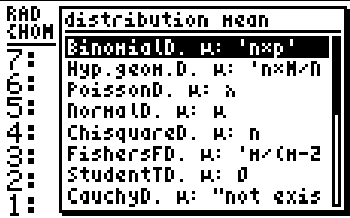
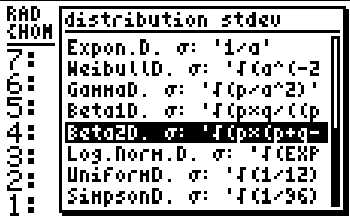



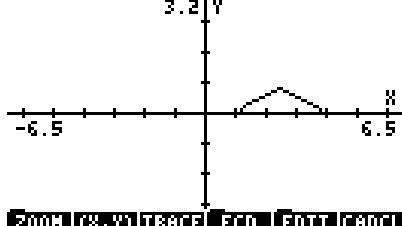
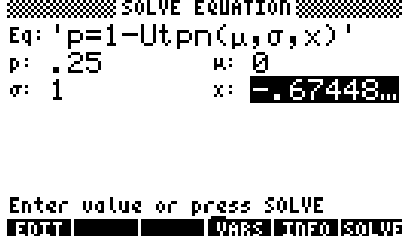
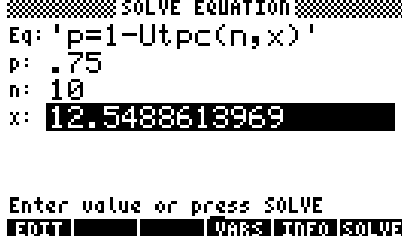
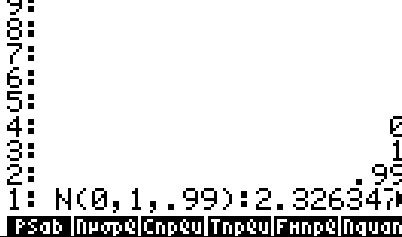
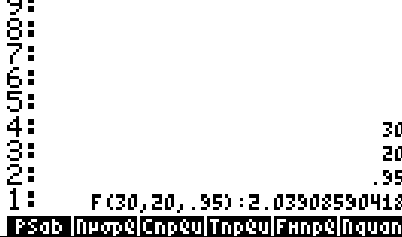
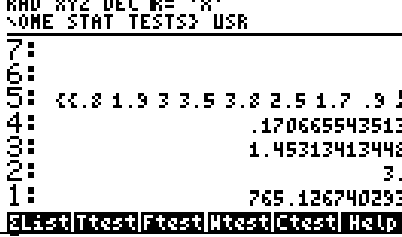

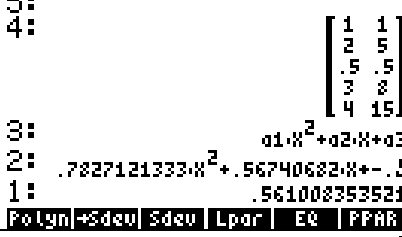
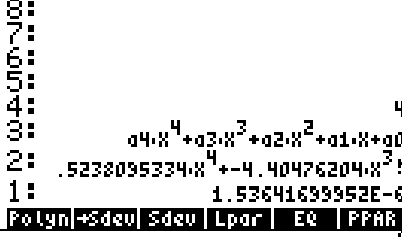
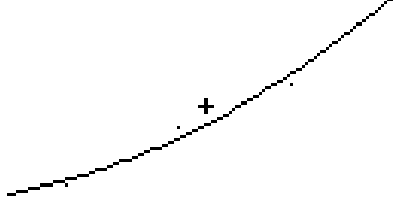
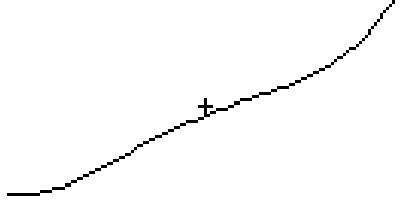


STAT

<p>MDATA: multiple data, last column = multiplicity, Mtot, Mmean, Msdev (0.5s) Mvar, Mpsdev, Mpvar (0.1s) pop. stand. dev., pop.variance</p>	<pre> 5: 4: [1. 2. 5.] [3. 4. 6.] [5. 6. 4.] [7. 8. 7.] 3: [92. 114.] 2: [4. 181818 5. 181818] 1: [2. 363137 2. 363137] EDAT Mtot Mmean Msdev Mvar Mpsdev </pre>	<pre> 5: 4: [5. 584416 5. 584416] 3: [2. 308805 2. 308805] 2: [5. 330579 5. 330579] 1: Hovar MEV MESE CST Help EERR </pre>
<p>COMBI: Combr: COMB(n+k-1,k) Permr: {n1 nk} to n!/(n1!..nk!), n=Σnk (0.1s) Pbino, ΣPbino binomial probability, sum (0.5s)</p>	<pre> 5: 4: 49 3: 25827165 2: {1 2 3 4} 1: 12600 Permr Combr Pbino EPbino Phypg EPhyp </pre>	<pre> 5: 4: 1.66472932393E-6 3: 2: 20 1: .928229882324 Permr Combr Pbino EPbino Phypg EPhyp </pre>
<p>COMBI: Phypgeo: hypergeometric probability (0.4s)</p> <p>sum</p>	<pre> 5: 4: 20 3: 12 2: 8 1: .205382233865 Permr Combr Pbino EPbino Phypg EPhyp </pre>	<pre> 5: 4: 20 3: 12 2: 8 1: .995300468365 Permr Combr Pbino EPbino Phypg EPhyp </pre>
<p>DISCR: Dbino: 10 0.3 to binomial distribution (0.5s)</p> <p>Dint: distribution function, Dder gives again distr.(0.2s)</p>	<pre> 5: 4: [0. .05764801] 3: [1. .13765032] 2: [2. .23647548] 1: [3. .25412184] [4. .1361367] [5. .04667544] [6. .01000128] [7. .00123472] [8. .00008561] EDAT Dint Dder Dmean Dsdev Dbarp </pre>	<pre> 5: 4: [0. .05764801] 3: [1. .25529833] 2: [2. .55177381] 1: [3. .20589565] [4. .34203235] [5. .38870779] [6. .33870367] [7. .33933439] [8. 1.] EDAT Dint Dder Dmean Dsdev Dbarp </pre>
<p>DISCR: Dmean, Dsdev: mean, stand, dev. (0.5s) DΣprob: sum of prob. Dpquantil: 0.75 quantil of distribution (0.2 s)</p>	<pre> 5: 4: 2.4 3: 1.29614813968 2: 1 1: .55177381 DΣprob DΣprob Dmean Dpquantil Dbino Dhypg </pre>	<pre> 5: 4: [1. .25529833] 3: [2. .55177381] 2: [3. .20589565] 1: [4. .34203235] [5. .38870779] [6. .33870367] [7. .33933439] [8. 1.] DΣprob DΣprob Dmean Dpquantil Dbino Dhypg </pre>
<p>DISCR: Dbarplot: plot of binomial distribution n=20, p=0.4 (1s)</p> <p>Dint, Dbarplot: plot of distribution function (1s)</p>		
<p>CONTI: Nμσ: normal distribution (3s)</p> <p>Cab: Cauchy distribution (1s) Wap: Weibull distribution (1s)</p>	<pre> 5: μ 4: σ 3: X 2: √2 1: (X-μ)² / (2σ²) FX GfFX Cmean Csddev Wvar Cdn </pre>	<pre> 5: b 4: (X² - 2aX + a² + b²) · π 3: P · a · X^P 2: X · e^(-a · X^P) 1: Fnn Tn Cab Pab Ea Wap </pre>
<p>CONTI: β1pq: 1. Beta distribution (3s)</p> <p>Ea: exponential distribution γap: Gamma distribution numeric values (1s)</p>	<pre> 5: p 4: q 3: X 2: (X² - X) · q · p! 1: -q · p · X^p · (p+q-1) · (-X-1)^(p-1) Wap γap β1pq β2pq Lvar Uab </pre>	<pre> 5: Ea(1. .2.) 4: .135335283237 3: γap(1. 2. 3) 2: .149361205104 1: Wap γap β1pq β2pq Lvar Uab </pre>

<p>CONTI:</p> <p>Cmean, Csddev: chooseboxes with mean, standard deviation of distributions (0.1s), OK puts copy on stack.</p>		
<p>CONTI:</p> <p>PNab: 71(μ) 11(σ) 70(a) 89 (b) probability between 70 and 89 (0.2s)</p> <p>PB1ab: 2(p) 3(q) 0.3(a) 0.5(b) (5s)</p>		
<p>CONTI:</p> <p>Grfx: plot distribution C2(5,X) CHI2 (5s)</p> <p>Sab(1,4,X): Simpson distr. (8s)</p>		
<p>CONTI:</p> <p>Percentile of normal distribution (1s)</p> <p>Percentile of CHI2 distribution (1s)</p>		
<p>CONTI:</p> <p>Percentile of normal distribution (1s)</p> <p>Percentile of F distribution (1s)</p>		
<p>TESTS,FCFIT:</p> <p>Ttest, Ftest, Wtest, Ctest of data list (2s)</p> <p>Linp: linear parameter fit (5s)</p> <p>Sdev: standard deviation of fit</p>		
<p>FCFIT:</p> <p>Linp: linear parameter fit with Sdev (4s)</p> <p>Polyn: generates polynomial</p> <p>Linp: same fit with higher order polynomial (7s)</p>		
<p>FCFIT:</p> <p>FSplot: scatter and function plot (6s)</p> <p>polynomial of 2. degree</p> <p>polynomial of 4 degree</p>		

FCFIT:	7:	6:	5:	
Nlinp: nonlinear parameter fit	6:			
with start values and Sdev	5:	$\begin{bmatrix} 0.00 & 0.20 \\ 1.00 & -1.40 \\ 3.00 & -2.00 \end{bmatrix}$	$\begin{bmatrix} 0.00 & -1.50 \\ 2.00 & 0.50 \\ 3.00 & 1.00 \\ 6.00 & -1.00 \\ 9.00 & -3.00 \end{bmatrix}$	
(11s)	4:	$a1 \cdot X + a2 \cdot e^{a3 \cdot X}$	4:	$a1 \cdot \sin(a2 \cdot X) + a3$
	3:	$\{1.00 \ 1.00 \ 1.00\}$	3:	$\{2.00 \ 0.50 \ 1.00\}$
	2:	$0.20 \cdot e^{0.73 \cdot X} - 3.06 \cdot X$	2:	$2.01 \cdot \sin(0.50 \cdot X) - 1.19$
second example (34s)	1:	$6.36E-11$	1:	0.20
	Polyn +Sdev Sdev Lpar Ee PPAR		Polyn +Sdev Sdev Lpar Ee PPAR	