TI-83Plus Display

Press **STAT** $\rightarrow$ **CALC** $\rightarrow$ **1:1-Var Stats**. S_x is the sample standard deviation. σ_x is the population standard deviation.

1-Var Stats
$\bar{x} = 6$
$\sum x = 48$
$\sum x^2 = 296$
Sx = 1.069044968
$\sigma x = 1$
$\downarrow n = 8$

TI-83 Plus Press **DISTR** key, scroll to **binompdf** (n, p, r). Enter the number of trials *n*, the probability of success on a single trial *p*, and the number of successes *r*. This gives P(*r*). For the cumulative probability that there are *r* or fewer successes, use **binomcdf** (*n, p, r*).

binompdf (6, **.**3, 4)

P(*r*) = 4 **.**059535

binomcdf (6, **.**3, 4)

P($r \leq 4$) **.**989065

TI-83Plus Press the **DISTR** Key and select **3: invNorm** (area, μ, σ)

invNorm(**.**97, 40, 5)
49**.**40396805

TI-83Plus This calculator gives the most extensive support. The user can opt to enter raw data or just summary statistics. In each case, the value of σ (or the sample estimate) must be specified. Press the **STAT** key and select **TESTS**, use **7: ZInterval**. The TI-83Plus output shows the results for Example 2.

Z Interval	Z Interval
Inpt: Data **Stats**	(15**.**228, 15**.**972)
σ : 1**.**8	$\bar{x}$ = 15**.**6
$\bar{x}$: 15**.**6	n = 90
n:90	
C-Level: 95	
Calculate	

TI-83Plus Press **DISTR** Key, select **2: normalcdf (lower bound, upper bound,** μ, σ) and press enter. Type in the specified values. For a left-tail area, use a lower bound

setting at about 4 standard deviations below the mean. Likewise, for a right-tail area use an upper bound about 4 standard deviations above the mean. For our example, use a lower bound of μ -4σ = 2.3- 4(0.4) =0.7

normalcdf (**.**7 ,2,2**.**3,**.**4)

.2265955934

***TI-83*Plus**

You can generate random samples from uniform, normal, and binomial distribution. Press **MATH** and select **PRB.** Selection **5:randInt(lower, upper, sample size m)** generates *m* random integers from the specified interval. Selection **6:randNorm(** μ **,** σ **, sample size m)** generates m random numbers from a normal distribution with mean μ and standard deviation σ. Selection **7:randomBin(number of trials n, p, sample size m)** generates *m* random values (number of successes out of n trials) for a binomial distribution with probability of success *p* on each trial. You can put these values in lists by using **Edit** under **Stat**. Highlights in the list header, press Enter, and select one of the options discussed.

TI-83Plus This calculator gives the most extensive support. The user can opt to enter raw data or just summary statistics. In each case, the value of σ (or the sample estimate) must be specified. Press **STAT** Key and select **TESTS,** use **7:Interval**. The TI-83Plus output shows the results for Example 2.

ZInterval	ZInterval
Inpt:Data Stats	(15.228, 15.972)
σ **:** 1.8	$\bar{x}$ =15.6
$\bar{x}$: 15.6	n=90
n:90	
C-Level: 95	
Calculate	

TI-83Plus Press the **STAT** Key, select **TESTS** and choose option **8:Interval**. You may use either raw data in a list or summary statistics.

TI-83Plus Press **STAT,** select **TESTS,** option 1: Z-Test, then Draw.

Z – Test
Input : Data Stats
μ_0 : 21**.**3
σ : 2**.**7
$\bar{X}$: 22.1
n : 64
μ : $\neq$ μ_0 $\langle$ μ_0 $\rangle$ μ_0
Calculate Draw

TI-83Plus Press the **STAT** key, select **TESTS,** option **5:1-PropZTest**. The value of p_0 is from the null hypothesis $H_0: p = p_0$. The number of successes is the value for x.

TI-83Plus Enter the "before" data in column L1 and the "after" data in column L2 Highlight L3, type L1 – L2 and press enter. The column L3 now contains the B – A differences. To conduct the test, press **STAT,** select **TESTS,** and use option **2:T-Test**. Note the letter x is used in place of *d*.

L1	L2	L3	3	T-Test
58	60	-2		$\mu \neq 0$
61	64	-3		t = -2.645751311
53	52	1		p = .0456591238
60	65	-5		$\bar{x}$ = -2.33333333
71	75	-4		Sx = 2.160246899
62	63	-1		n = 6
L3 (7) =				

TI-83Plus Use the **STAT** key and highlight **TESTS**. The choice **4:2-SampTTest** performs a test of hypothesis for the difference of means using the Student's *t* distribution. The choice **0:2-SampTint** generates confidence intervals for the difference of means. Use **Pooled: Yes** when the assumption of equal variances or standard deviations is valid. Notice that the pooled variance is given in the output as S_{XP}.