HYPOTHESIS TEST

for two population means μ_1 and μ_2

(Always t-test)

They give us some observe data (samples)

two complete lists of data	we enter data in LIST 1 and LIST 2 of GDC
or **only the statistics**	**sample means:** $\bar{x}_1$ $\bar{x}_2$ **standard deviations:** s_{x_1} s_{x_2} **size of the samples:** n_1 n_2

We test a CLAIM for the two population means μ_1 and μ_2

CLAIM $\mu_1=\mu_2$ against	$\mu_1\neq\mu_2$	$\mu_1>\mu_2$ or $\mu_1<\mu_2$	
	2-tailed test	1-tailed test	
The **significance level** is usually	**10%** a=0.10	**5%** a=0.05	**1%** a=0.01
(they are clearly stated in the question)			

We state

[null hypothesis]	H_o: $\mu_1=\mu_2$
[alternative hypothesis]	H_1: $\mu_1\neq\mu_2$ or $\mu_1\neq\mu_2$ or $\mu_1<\mu_2$

We use GDC to find p-value

Statistics – TEST – t – (2 samples)
if **List**: statistics s_x, $\bar{x}$, n are already there if **Var**: we enter s_x, $\bar{x}$, n on ourselves
Execute gives
p-value

Conclusion

IF	THEN
p-value < a	we reject H_o
otherwise	we do not reject H_o