

Placement Algorithm - Input 1  
F-Test Two-Sample for Variances

Random    Penalty

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	-17.8542	-77.8708
Variance	2.366742	3667.358
Observations	720	960
df	719	959
F	0.000645	
P(F<=f) one-tail	0	
F Critical one-tail	0.891039	

$F < F \text{ Critical}$  and  $M(1) > M(2) \Rightarrow \text{Unequal}$

t-Test: Two-Sample Assuming Unequal Variances

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	-17.8542	-77.8708
Variance	2.366742	3667.358
Observations	720	960
Hypothesized Mean Difference	0	
df	961	
t Stat	30.69334	
P(T<=t) one-tail	4.8E-145	
t Critical one-tail	1.646441	
P(T<=t) two-tail	9.6E-145	
t Critical two-tail	1.962436	

$t \text{ Stat} > t \text{ Critical} \Rightarrow \text{Random is better}$