VII.

- <u>I.</u> In probability & Statistics, a population is set of same items or events which is of interest for some questions or experiments, it can be in a group of existing objects or individually.
- <u>II.</u> The sample in this research used is known as probability sample, because in this research, researcher has collected data of individual players.
- Yes, it is representative as the researcher has even divided the sample (home runs) in two categories, National League and American League and that of same size too, so it is a representative as each element has a chance to be picked.
- **IV.** It is a Null Hypothesis.
- **V.** I will use confidence level.
- **VI.** I will use Z- Test as sample is greater than 30.

(vii) Salution. $ C_1 = 8.8, S_1^2 = 77.44, n_1 = 1.5 $ $ S_2 = 7.8, S_2^2 = 60.84, n_2 = 1.5 $ $ N_1 = 44.75, N_2 = 42.875 $	
	10
$m = 44.75 , \tilde{x}_2 = 42.875$	
$z = (\bar{x}_1 - \bar{x}_2) - (U_1 - U_2)$	
Si2 + 52	
$\sqrt{n_1}$ $\sqrt{n_2}$	
$5,^{2} + 8,^{2} = 11.8593$	
ni na	
Z= (44.75 - 42.875) - (0-0)	
1-8593	
Z= 1.008	12.

(Viii)	
=> 95% C.I for National league:	
X= 44.751 15= 8-77)	
95%. C. El= (1961) 11 01 11	4
0 2 - 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	(9.221)
44.75 - (1.96) (8.771) < U < 44.75 + (1.96)	8,111
V40, 111 1111 1111 1111 1111 1111 1111 11	1 040 7
	Control of the Contro
142.031 < u < 47.468	
	7 111
-> 95% C.I. for American league	100 CT
x=42.875 18=7.723	11115
95CIY = 1.76	
42.875 - (1.96) (7.723) < U < 42.875+(1.96	1/7.723
1 (40)	(140)
140.481 < 45.260	
	tay and a

- *IX.* Ho Rejected.
- **X.** From the above answers and test, I concluded that Null Hypothesis is rejected since it does not falls in the region expected to accept the hypothesis conducted.
- Yes, we can easily find the mean, standard deviation so the data was enough to answer the original questions asked.
- **XII.** Mean, Median, Mode, and Quartiles might be used to answer the questions.

O#2	2 4 4 C
Solution:	uring sales
(a) n=20	CC
S= 2.45	evidely - all series
ž = 11·3	See at 1
to.05 = 2.093	1.5
× ± +0.05 (3)	11-22-11
11.3 - (2.093) (2.45)	< U < 11.3+ (2.073)/2.4
(\(\sqrt{20} \)	(J27
10.15 × UZ 12.45	Carl may
(b)	e and a second
Varsiance - 52	cor)
n	
1 7660	- 11 C - 1 - 12 C
(2.45)	= [0.300]
20	
and the second	>
	4.5
- 10 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	JANEAN CONTRACTOR

3#3		
Solution	=-0.014 < pf-pm <	0.064
n= 1000		
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xF = 275	1, 200	1 .
CI = 951. 1 x = 0.05.		
	A A A A A A A A A A A A A A A A A A A	
PM-PF =? , Zoos = 1.96		1
0		
- PM = 250 1= [0.250]		* 1
1000		175.73
		* *
9m = 1-0.250 = 10.750 11.11	N. T. T. T.	
PP = 275 = 0-275		
1000 (1000)	A STATE OF THE STA	
1000 - STANARY		the i
^		
7F = 1-0.28 = (0.728)		
The contract of the land of the contract of th		The Red William
= (Pp - pm) + Zo.os / Pm gm + Pr gr		
2 J nm nc		
= (0.275-0.250) + (1.96) (0.27(0-75)+ (0.20)		1
1000 100		
		and the second s