

normal coff Lower,

Activity to assist you with Choosing the Correct Inference Method.

Team or not to team?
- Start solo (10 min)
- Then get back together

S	One proportion z interval for P
W	One sample t interval for μ , including paired data
Е	Two proportion z interval for P_1 – P_2
0	Two sample t interval for $\mu_1 - \mu_2$
j	t interval for the slope of a least-squares regression line
F	Chi-square test for goodness of fit
Р	Chi-square test for independence

One proportion Z test for P	
One sample t test for μ , including paired data	
Two proportion Z test for P_1 – P_2	R
Two sample t test for $\mu_1 - \mu_2$	С
t test for the slope of a least-squares regression line	L
Chi-square test for homogeneity	Н
None of these procedures apply	Α

1. Which brand of AA batteries last longer - Duracell or Eveready? Ho' MD = ME

Ha' MD \(\forall ME

 According to a recent survey, a typical teenager has 183 contacts stored in his/her cellphone. Is this true at Maclay School?

Ha'M = 183 contacts

3. What percent of students at Maclay School have a Twitter account?

S () F

4. Is there a relationship between the age of a student's car and the mileage reading on the odometer?

Ho', B=0 Ha', B≠0

5. Is there a relationship between students' favorite academic subject and preferred type of music?

P Ho! Fav. sub and music type 6. Who is more likely to own an iPod - middle school

Who is more likely to own an iron girls or middle school boys? 1 to est using Pa-PB to est propperson

7. How long (in minutes per day) do teens typically spend brushing their teeth?

use X -> est 11= true mean

8. Are the marshmallow pieces in Lucky Charms

cereal equally distributed? h mallowally
Ho! marsh mallowally
pieces equally

9. Which brand of razor gives a closer shave? To answer this question, researchers recruited 25 dist, men to shave one side of their face with Razor A and the other side with Razor B. The whiskers, without shave cream, from each side of the face -A-1will be weighed.

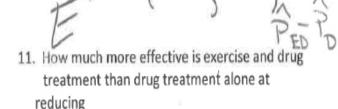
Paired to test
Paired to test

Ho! MD = 0

B-A

Ha! MD = 0

10. Is exercise and drug treatment more effective than drug treatment alone at reducing the incidence of heart attacks among men aged 65 and older?



the incidence of heart attacks among men aged 65 and older? Ho, $P_{E4D} = P_D$ Ha, $P_{ED} \angle P_D$

Ma. PED Z PD

 Estimate the difference in mean grip strength for patients who underwent carpal tunnel surgery using endoscopy and patients who underwent open-incision surgery.

use $\overline{X}_{E} - \overline{X}_{S}$ to estimate

13. A large city's DMV claims that 78% of candidates pass their driving test on the first try. A local newspaper reported that only 61 of 90 randomly selected teens passed on the first try. Does this suggest that the teens have a lower pass rate than the DMV's claim?

Ho: P = 78

Ho: P 478

14. Many high schools survey graduating classes to cletermine the plans of the graduates. We are interested to see if the plans of students in high schools from 5 different regions of the US are the

same.

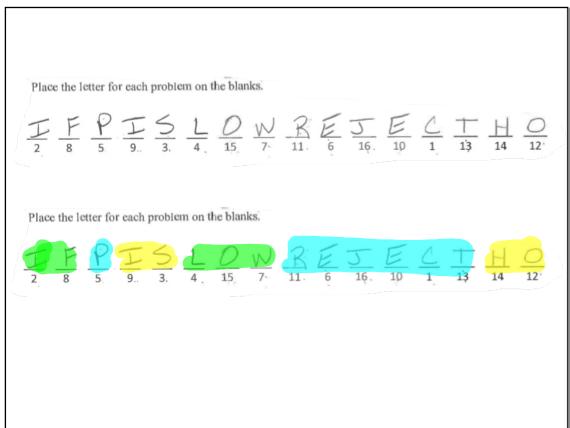
Hoidist of grad.
Hoidist of grad.
Plans same for
Hai II lafter

15. From high school students who have posted online profiles, how much more likely are girls than boys, on average, to have others view their profile.

6. Researchers in Food Science studied how big 11 - 110

16. Researchers in Food Science studied how big people's mouths tend to be. They measured mouth volume by pouring water into the mouths of subjects who lay on their backs. (Could there be another way?) It turns out that mouth volume is related to height. Estimate how mouth volume of 90 randomly selected individuals increases as their height increases.

J using samplest slope b to ton Population g March 14, 2019



Assignment

Ch. 7 Strive