

**Two-sample qualitative variable problems, OR
What fresh p is this?**

p_1 : The population proportion for group 1. For example, what fraction of CRC students usually take public transportation to school. Note: You probably don't know this number.

\hat{p}_1 : The sample proportion for group 1. Also, $\hat{p}_1 = \frac{x_1}{n_1}$.

p_2 : The population proportion for group 2. For example, what fraction of Sac City students usually take public transportation to school. Note: You probably don't know this number.

\hat{p}_2 : The sample proportion for group 2. Also, $\hat{p}_2 = \frac{x_2}{n_2}$.

\hat{p} : The pooled sample proportion. Assuming there is no difference between groups, combine the sample: $\hat{p} = \frac{x_1 + x_2}{n_1 + n_2}$.

Then calculate z . And finally, as always, find the...

p -value: Assuming the populations are equal, what is the probability of getting two sample proportions as different as you got or more so?