

Stat 123 Homework 7

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Recall hypothesis testing for a proportion from STAT 121. Provide a definition for the function below to compute the z test statistic testing the null hypothesis that the proportion is p_0 (which is 0.5 by default) given the numbers of successes and trials.

#Not sure if this is the right formula. I just found this in my Stat 201 book and tried it on

#an example and it worked just fine.

```
prop.test <- function(n.success,n.trials,p0=0.5){  
  pHat <- n.success / n.trials  
  top <- pHat - p0  
  bottom <- sqrt((p0 * (1 - p0)) / n.trials)  
  Z <- top / bottom  
  return(Z)  
}
```