

## Handout 8: Confidence interval for proportion supporting gay marriage

```
table(politics$gaymarriage)

##
## No legal recognition      Civil unions Support gay marriage
##              773              992              2473

#sum up to get n
1543+1989+2382

## [1] 5914

#estimate p-hat
round(2382/5914,2)

## [1] 0.4

#t-stat
qt(0.975, 5914-1)

## [1] 1.960365
```

$$\text{standard error} = \sqrt{\hat{p} * (1 - \hat{p}) / n} =$$

$$\text{confidence interval} = \hat{p} \pm t * (\text{standard error}) =$$

Name (Print and Sign): \_\_\_\_\_