

HW 10 Interval Estimation

1. Give line comments to the following R function (Formula #2)

```
4. int.est = function(x,conf){  
5  
6     area = (conf/100)+((1-(conf/100))/2)  
7     se = sd(x)/sqrt(length(x))  
8     margin = qt(area,length(x)-1)*se  
9  
10    lower = mean(x)-margin  
11    upper = mean(x)+margin  
12  
13    cat("lower=",lower,"upper=",upper)  
14  
15. }  
16  
17 score = c(83,73,62,63,71,77,77,59,92)  
18 int.est(score,95)  
19  
20 t.test(score)$conf.int
```

2. Use this function to find 95% CI. of the true mean from score data
3. Compare the results with the confidence interval from t-test