

# Homework 7

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Did two of them at least.

9.14

```
atoa <- c(88.3,40.7,36.3,27.3,36.8,91.7,67.3,7,45.2,23.3,98.8,90.1,17.2,23.7,97.4,32.4,87.8,69.8,62.6,9
d1 <- max((1:length((atoa/100))) / length((atoa/100)) - (atoa/100))
d2 <- max((atoa/100) - ((1:length(atoa/100)) - 1) / length(atoa/100))
d1;d2
```

```
## [1] 0.74
```

```
## [1] 0.883
```

The larger of the above is correct. In either case, the number is larger than the critical value, so we can reject that the accidents are uniformly distributed.

10.1

a.

null:  $\mu = 22.5$  jobs

alt:  $\mu \neq 22.5$  jobs

```
times <- c(18.9,22,19.4,22.1,19.8,21.9,20.2)
mu <- 22.5
t2 <- t.test(times, mu = mu)
t2[1]$statistic
```

```
##          t
## -3.679941
```

A negative here means we can do this...

```
qt(.025,length(times)-1)
```

```
## [1] -2.446912
```

Yay we can reject the null.