

Homework 7.2

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Exercise 8.9 (a)

```
(8-6.5)-2.021*sqrt(3.25*(2/21))
```

```
## [1] 0.3756194
```

```
(8-6.5)+2.021*sqrt(3.25*(2/21))
```

```
## [1] 2.624381
```

(b)

```
(8-6.5)+2.032*sqrt((2.1213^2)/21+(1.4142^2)/21)
```

```
## [1] 2.63049
```

```
(8-6.5)-2.032*sqrt((2.1213^2)/21+(1.4142^2)/21)
```

```
## [1] 0.3695104
```

Exercise 8.14 (a)

```
t1=qt(.95,25)
t2=qt(.05,25)
(27.5-25.5)+t1*sqrt(2/25)
```

```
## [1] 2.483135
```

```
(27.5-25.5)-t1*sqrt(2/25)
```

```
## [1] 1.516865
```

(b)

```
t1=qt(.95,25)
37.3-30.6+t1*sqrt(13/25)
```

```
## [1] 7.931758
```

```
37.3-30.6-t1*sqrt(13/25)
```

```
## [1] 5.468242
```

(c) We can conclude it is more difficult to handle a high volume during the holidays.