

# Homework 8.1

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Exercise 9.1 (a)

```
2.57583^2*.5*(1-.5)/(.05^2)
```

```
## [1] 663.49
```

(b)

```
2.57583^2*.3*(1-.3)/(.05^2)
```

```
## [1] 557.3316
```

(C)

```
2.57583^2*.3*(1-.3)/(.05^2)/.4
```

```
## [1] 1393.329
```

Exercise 9.4 (a)

```
(1.96/.002)^2*.5*(1-.5)
```

```
## [1] 240100
```

(b) Random sampling will give reliable information about the true number of defective items.  
Exercise 9.6 (a)

```
.8+1.645*sqrt(.8*(1-.8)/100)
```

```
## [1] 0.8658
```

```
.8-1.645*sqrt(.8*(1-.8)/100)
```

```
## [1] 0.7342
```

(b)

```
.8+1.645*sqrt(.8*(1-.8)/200)
```

```
## [1] 0.8465276
```

```
.8-1.645*sqrt(.8*(1-.8)/200)
```

```
## [1] 0.7534724
```