

HW1-Q3

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v

```
qnorm(1-0.025)
```

```
## [1] 1.959964
```

```
1-pnorm(1.96-(2*sqrt(78))/9)+pnorm(-1.96-(2*sqrt(78))/9)
```

```
## [1] 0.5010864
```

v

```
sigma1<-5
```

```
sigma2<-7
```

```
delta <-2
```

```
alpha<-0.05
```

```
beta<-0.1
```

```
r<-2
```

```
n1<-((2*sigma1+sigma2)*(qnorm(1-beta)+qnorm(1-alpha/2))^2)/(2*delta^2)
```

```
n2<-2*n1
```

```
n<-n1+n2
```

```
n
```

```
## [1] 66.98482
```