

# Untitled

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## Loading packages

```
library("ggplot2")  
library("ggpubr")
```

```
#set.seed(159)
```

## Loading data

```
samp25_mean <- replicate(50, mean(rnorm(25, 0, 1)))  
samp200_mean <- replicate(50, mean(rnorm(200, 0, 1)))  
samp500_mean <- replicate(50, mean(rnorm(500, 0, 1)))  
samp1000_mean <- replicate(50, mean(rnorm(1000, 0, 1)))  
samp10000_mean <- replicate(50, mean(rnorm(10000, 0, 1)))
```

## Loading plots

```
p1 <- ggplot(NULL, aes(x = samp25_mean, ..density..)) + geom_histogram(binwidth = 0.05) + xlim(c(-.5, .5))  
p2 <- ggplot(NULL, aes(x = samp200_mean, ..density..)) + geom_histogram(binwidth = 0.035) + xlim(c(-.35, .35))  
p3 <- ggplot(NULL, aes(x = samp500_mean, ..density..)) + geom_histogram(binwidth = 0.025) + xlim(c(-0.25, 0.25))  
p4 <- ggplot(NULL, aes(x = samp1000_mean, ..density..)) + geom_histogram(binwidth = 0.015) + xlim(c(-.15, .15))  
p5 <- ggplot(NULL, aes(x = samp10000_mean, ..density..)) + geom_histogram(binwidth = 0.005) + xlim(c(-.05, .05))
```

## Combining plots

```
ggarrange(p1, p2, p3, p4, p5)
```

```
## Warning: Removed 2 rows containing missing values (geom_bar).  
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## Warning: Removed 1 rows containing non-finite values (stat_bin).  
  
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```

