Symbols and functions from today's session

R (Simulations)

Normal distribution

```
#this function draws x samples from a Normal distribution
#with a mean of y and a standard deviation of z
rnorm(n = x, mean = y, sd = z)
```

For example,

```
sample <- rnorm(n = 5, mean = 130, sd = 5)
sample
```

```
## [1] 133.7864 128.0789 130.3438 126.4021 118.1416
```

Bernoulli distribution (Binomial)

```
#this function draws x samples from a Binomial distribution
#that can take (size+1) values (if size = 1, then it's a Bernoulli dist.),
#with a probability of z
rbinom(n = x, size = y, p = z)
```

For example,

```
sample <- rbinom(n = 5, size = 1, p = 0.5)
sample #five fair coin flips (1 = heads; 0 = tails)
```

```
## [1] 1 1 0 0 0
```

Poisson distribution

```
#this function draws x samples from a Poisson distribution
#with a rate of y
rpois(n = x, lambda = y)
```

For example,

```
sample <- rpois(n = 5, lambda = 130)
sample
```

```
## [1] 119 123 154 137 147
```