

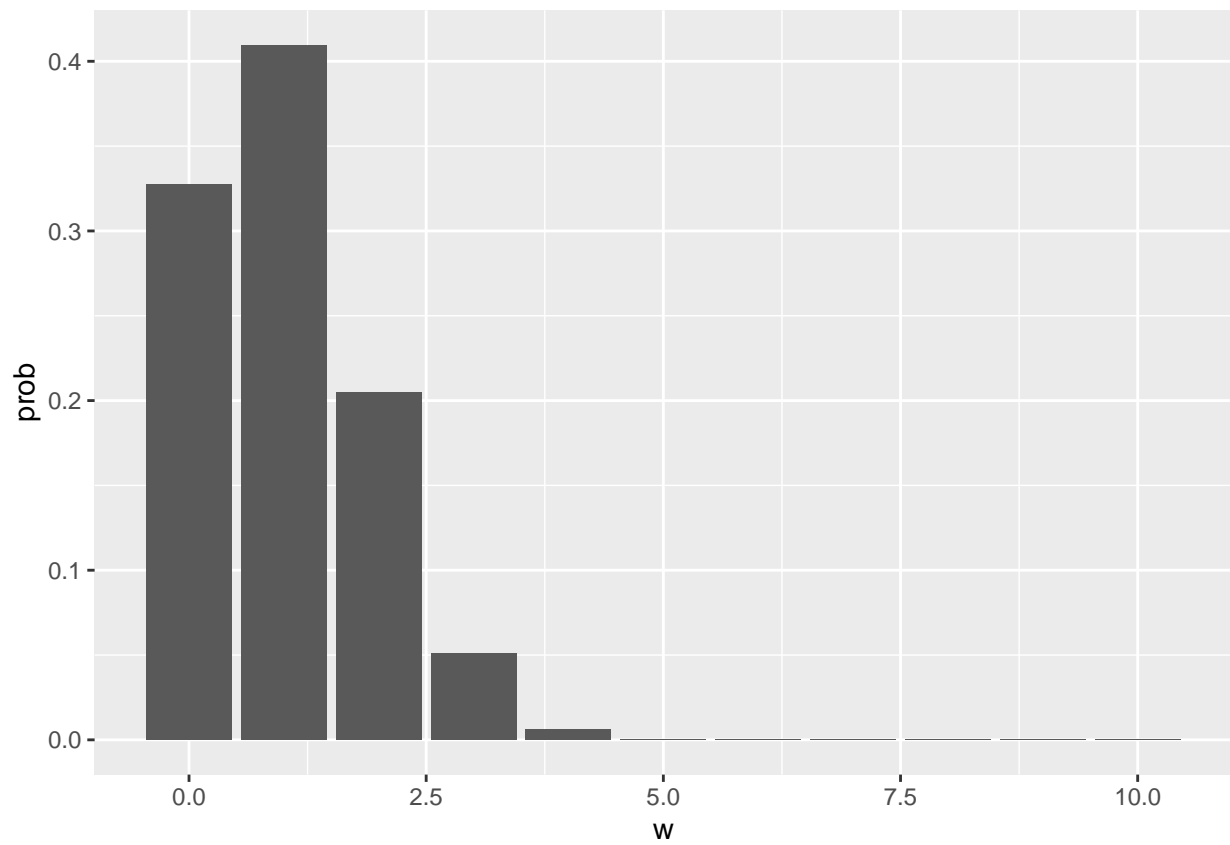
```
pmf <- dbinom(x = 0:10, size = 5, prob = 0.2)
pmf_df <- data.frame(w = 0:10, prob = round(x = pmf, digits = 4))
pmf_df
```

```
##      w  prob
## 1    0 0.3277
## 2    1 0.4096
## 3    2 0.2048
## 4    3 0.0512
## 5    4 0.0064
## 6    5 0.0003
## 7    6 0.0000
## 8    7 0.0000
## 9    8 0.0000
## 10   9 0.0000
## 11  10 0.0000
```

```
pmf2 <- dbinom(x = 0:10, size = 5, prob = 0.8)
pmf2_df <- data.frame(w = 0:10, prob = round(x = pmf2, digits = 4))
pmf2_df
```

```
##      w  prob
## 1    0 0.0003
## 2    1 0.0064
## 3    2 0.0512
## 4    3 0.2048
## 5    4 0.4096
## 6    5 0.3277
## 7    6 0.0000
## 8    7 0.0000
## 9    8 0.0000
## 10   9 0.0000
## 11  10 0.0000
```

```
library("ggplot2")
ggplot(pmf_df, aes(w, prob)) + geom_col()
```



```
ggplot(pmf2_df, aes(w, prob)) + geom_col()
```

