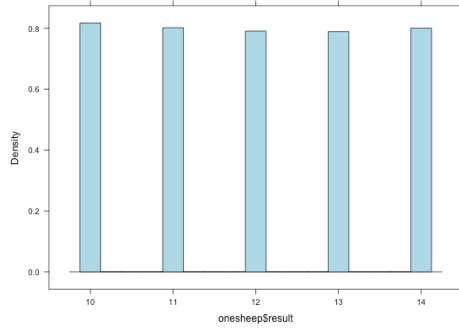
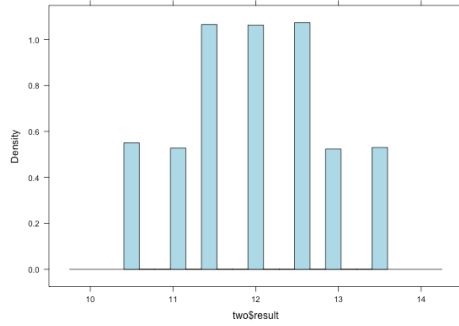


Activity #14 - simulations.

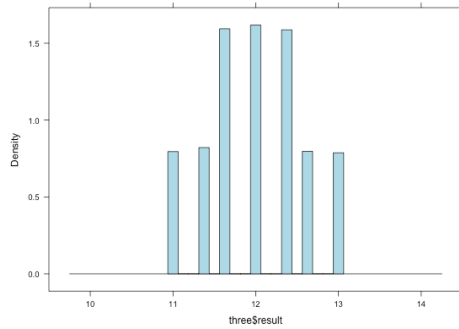
50,000 simulated samples of sheep (calculating mean of each sample)



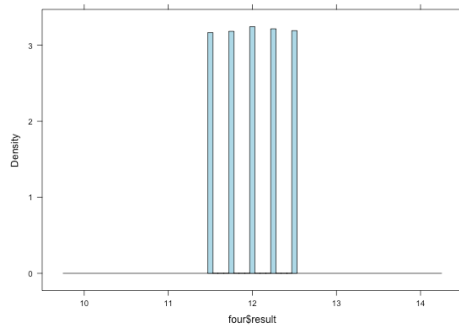
Sample one sheep  
Mean = 11.989  
Std. Dev = 1.4197



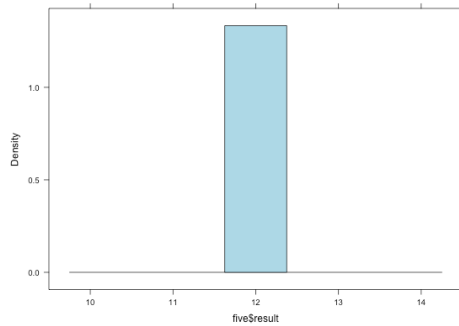
Sample two sheep  
Mean = 11.994  
Std. Dev = 0.8678



Sample three sheep  
Mean = 12.001  
Std. Dev = 0.5774



Sample four sheep  
Mean = 12.001  
Std. Dev = 0.3526



Sample five sheep  
Mean = 12.000  
Std. Dev = 0.000

Code:

```
sheep <- c(10, 11, 12, 13, 14)
mean(sheep)
sd(sheep)
onesheep <- do(50000) * mean(sample(sheep, 1, replace=F))
histogram(onesheep$result, col="lightblue")
mean(onesheep$result)
sd(onesheep$result)
two <- do(50000) * mean(sample(sheep, 2, replace=F))
histogram(two$result, col="lightblue")
mean(two$result)
sd(two$result)
```