

## Solutions:

(1) (1)

```
> vals=2:11  
> counts=c(rep(4,8), 4*4, 4)  
> box=rep(vals,times=counts)  
> results=replicate( 100000, sum( sample( box, size=2,  
replace=FALSE ) ) )
```

(Note, your answers below SHOULD differ each time you run the code above)

(2) > mean(results)

```
> sd(results)
```

(3) > mean(results== 21)

(4) > mean(results>= 18)

(5) table(results)/100000