Assignment 3

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```r
#Question 1
print(pbinom(9,size=12,1/6)-pbinom(6,size=12,1/6))
```

```
## [1] 0.001291758
```

```r
print(dbinom(7, 12, 1/6) + dbinom(8, 12, 1/6) + dbinom(9, 12, 1/6))
```

```
## [1] 0.001291758
```

```r
#Question 2
a=pnorm(84, 72, 15.2, lower.tail = FALSE)
print(a)
```

```
## [1] 0.2149176
```

```r
#Question 3
dpois(0, 5)
```

```
## [1] 0.006737947
```

```r
dpois(48, 50) + dpois(49, 50) + dpois(50, 50)
```

```
## [1] 0.1678485
```

```r
#Question 4
dbinom(3, 5, 17/250)
```

```
## [1] 0.002731232
```

```r
dhyper(3, 17, 233, 5)
```
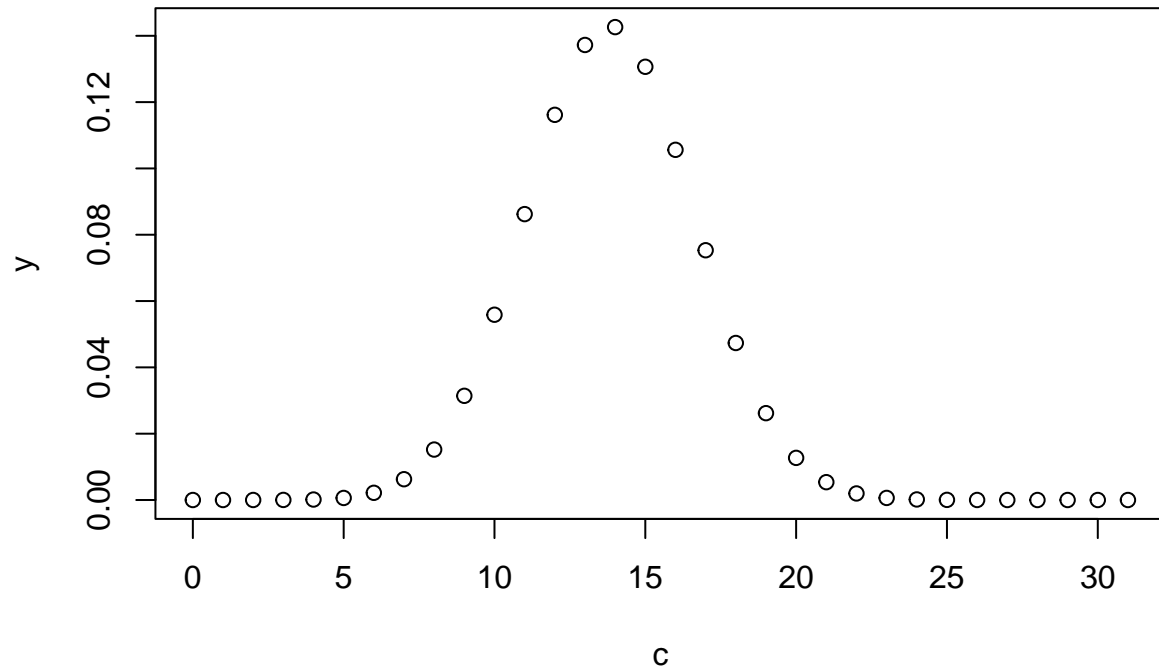
```
## [1] 0.002351153
```

```r
#Question 5
#(a)Binomial distrubution

#(b),(c)
n=31
p=0.447
```
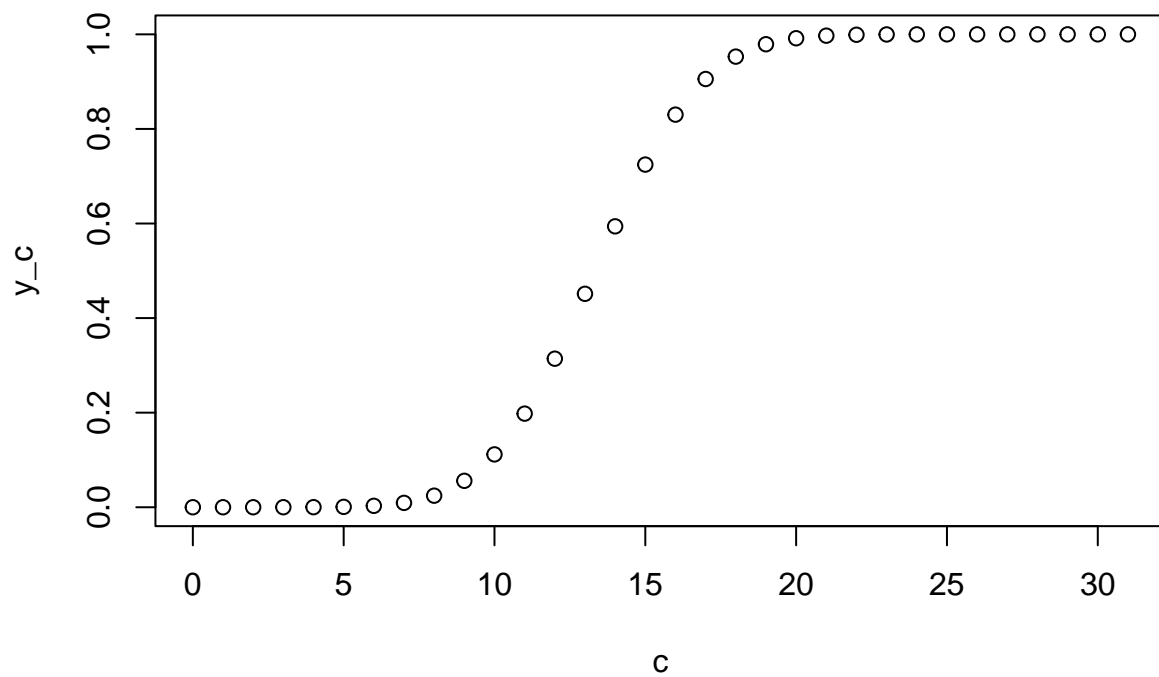
```
q=1-p

c=seq(0,n)
y = dbinom(c,n,p)
plot(c,y)
```



```
y_c = pbinom(c,n,p)
plot(c,y_c)
```

```
#(d)
sprintf("Mean %f",n*p)
```

```
## [1] "Mean 13.857000"
```

```
sprintf("Varience %f",n*p*q)
```

```
## [1] "Varience 7.662921"
```

```
sprintf("Standard deviation %f",sqrt(n*p*q))
```

```
## [1] "Standard deviation 2.768198"
```