### ICA5

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### **Table of Contents**

```
      Question 1
      1

      a
      1

      b
      1

      c
      1

      d
      2

      e
      2

      Question 2
      2

      a
      2

      b
      2

      c
      2

      d
      3
```

### **Question 1**

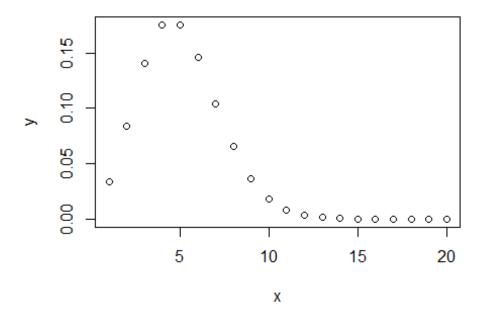
```
dpois(3,15/4)
## [1] 0.2066989

b
1-ppois(11,15)
## [1] 0.8152482

c
qpois(c(0.5,0.9),2.5)
## [1] 2 5
```

```
d
rpois(10,30)
## [1] 27 40 32 30 30 36 26 26 27 32

e
x <- 1:20
y <- dpois(x,5)
plot(x,y)</pre>
```



## **Question 2**

```
a

pnbinom(10,5,0.4)

## [1] 0.7827223

b

1-pnbinom(24,5,0.4)

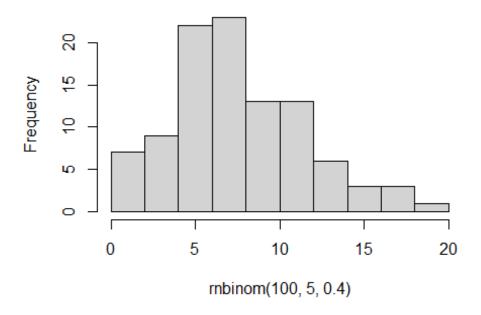
## [1] 0.002201528

c

mean(rnbinom(100,5,0.4))

## [1] 7.39
```

# Histogram of rnbinom(100, 5, 0.4)



```
x <- 1:25
y <- dnbinom(x,5,0.4)
plot(x,y)</pre>
```

