1)

x=c(10.1,7.3,8.5,5.0,4.2,3.1,2.2,9.0,9.4,6.1,3.3,10.7,1.5,8.2,10.0,4.7,3.5,6.5,8.9,6.1)

table(cut(x, breaks = seq(from = 1, to = 11, length = 6)))

hist(x, breaks = seq(from = 1, to = 11, length = 6))

y= c(3.3,10.7,1.5,8.2,10.0,4.7,3.5,6.5,8.9,6.1)

mean(y)

median(y)

sd(y)

> x=c(10.1,7.3,8.5,5.0,4.2,3.1,2.2,9.0,9.4,6.1,3.3,10.7,1.5,8.2,10.0,4.7,3.5,6.5,8.9,6.1)

> table(cut(x, breaks = seq(from = 1, to = 11, length = 6)))

 (1,3] (3,5] (5,7] (7,9] (9,11]

 2 6 3 5 4

> hist(x, breaks = seq(from = 1, to = 11, length = 6))



> y= c(3.3,10.7,1.5,8.2,10.0,4.7,3.5,6.5,8.9,6.1)

> mean(y)

[1] 6.34

> median(y)

[1] 6.3

> sd(y)

[1] 3.08984

>

2)

X=c(**2, 3, 2, 1, 2, 1, 2, 1, 2, 3, 1, 1, 1, 2, 2, 3, 1, 1, 1, 1, 2, 1, 1, 2, 2, 1, 2, 1, 2, 3, 2, 3, 2, 1, 2, 1, 2, 1, 2, 3, 1)**

**Y=table(X)**

**barplot(Y)**

> X=c(2, 3, 2, 1, 2, 1, 2, 1, 2, 3, 1, 1, 1, 2, 2, 3, 1, 1, 1, 1, 2, 1, 1, 2, 2, 1, 2, 1, 2, 3, 1, 1, 2, 2, 3, 1, 1, 1, 1, 2, 1)

> Y=table(X)

> barplot(Y)

>



3)

X=c("superior","superior","médio","médio","médio","médio","médio","médio","fundamental","fundamental")

table(X)

barplot(table(X))

> X=c("superior","superior","médio","médio","médio","médio","médio","médio","fundamental","fundamental")

> table(X)

X

fundamental médio superior

 2 6 2

> barplot(table(X))

>



x=c(34,43,31,37,24,25,27,22,21,26)

table(cut(x, breaks = seq(from = 20, to = 45, length = 6)))

hist(x, breaks = seq(from = 20, to = 45, length = 6))

> x=c(34,43,31,37,24,25,27,22,21,26)

> table(cut(x, breaks = seq(from = 20, to = 45, length = 6)))

(20,25] (25,30] (30,35] (35,40] (40,45]

 4 2 2 1 1

> hist(x, breaks = seq(from = 20, to = 45, length = 6))

>



4)

a) 10.000

b) 9.000

c)7.500

d) 1.000

e) 16

f) {16/65=0.2461538} 24,62%

g) 3ª classe

h) 18/65\*100 = 27,69%

 i) (8+10+16+14+10)/65\*100 =89.23 %

 (8+10)/65\*100 = 27,69%

j)

|  |  |  |
| --- | --- | --- |
|  | FR | Percentual |
| 8 | 0,12 | 12,31 |
| 10 | 0,15 | 15,38 |
| 16 | 0,25 | 24,62 |
| 14 | 0,22 | 21,54 |
| 10 | 0,15 | 15,38 |
| 5 | 0,08 | 7,69 |
| 2 | 0,03 | 3,08 |
| 65 |  |  |