Assign

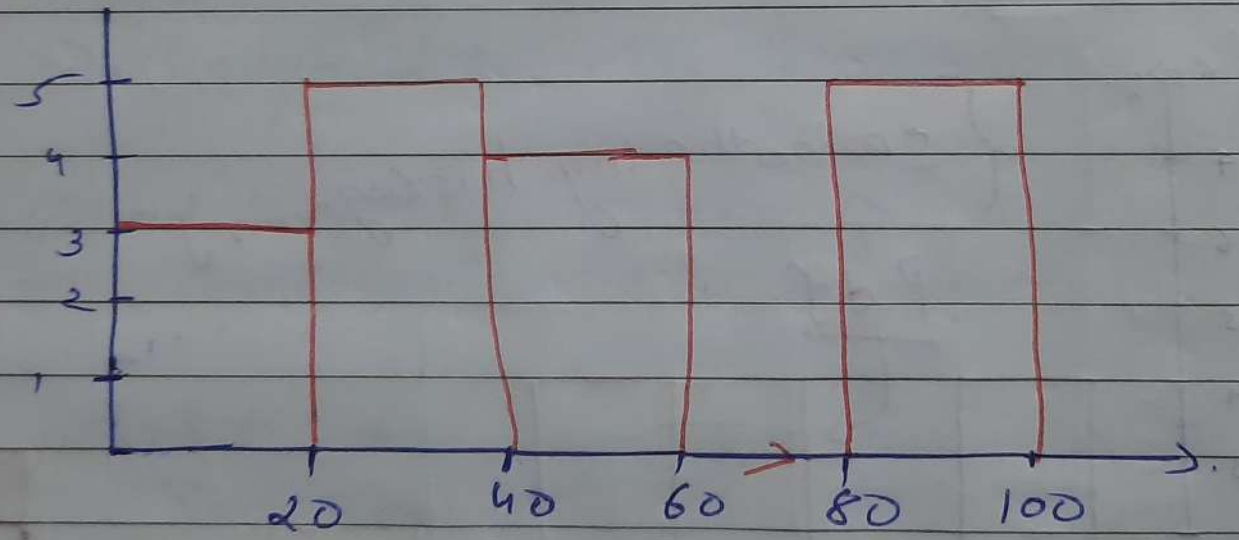
⇒

eg = 10, 13, 18, 22, 27, 32, 38, 40, 45, 51, 50, 88, 90, 92, 94, 99

Page No.

Date / /

Bins = 5 ; Bin size = 20



50 60 70 80 90 100

(Q4)

2, 2, 3, 4, 5, 5, 5, 6, 7, 8, 8, 8, 8, 8, 9, 9, 10, 11, 11, 12

99 Percentile = $\frac{99}{100} \times (20+1)$

$\frac{99}{100} \times 21$

20.79 th index

∴ 12 is the answer.

Square test.

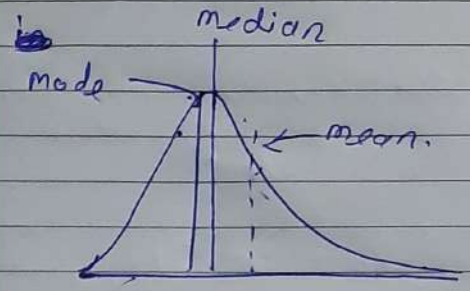
Chi square test claims about population proportion

it is a non

Page No.
Date

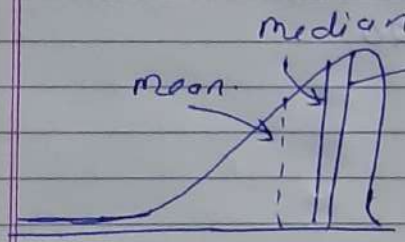
Ans:- in Right skewed

mean > median > mode.



in Left skewed

mode > median > mean.



$0.1256 > 0.05$

Q) A car company believes that the percentage of residents in city ABC that owns a vechicle is 60% or less. A sales manager disagrees with this. He conducts a hypotesis testing surveying 250 residents & found 170 responded yes to owning a vehicle.

(a) State the null & Alternate Hypothesis.

(b) At 10% significance level is there enough evidence to support the idea that vehicle ownership in city ABC is 60% or less.

$\Rightarrow$ $H_0 = P_0 \leq 60\%$ (Null Hypothesis)

$H_1 = P_0 > 60\%$ (alternate Hypothesis)

$n = 250$

$x = 170$

$\hat{P} = \frac{x}{n} = \frac{170}{250}$

Page No. /
Date / /

$\hat{p} = 0.68$

$p_0 = 60\%$

$q_0 = 40\%$

$\alpha = 0.10$

$$3\text{tosc} = \frac{0.68 - 0.60}{\sqrt{\frac{0.68 + 0.60}{250}}}$$

$$= \frac{0.08}{0.0040398019}$$

$$= 1.98$$

$1.28 < 1.98$

$\therefore$ Reject the null hypothesis.