

## Exercises on chapter 2

**Complete the table ,then answer  
the following questions**

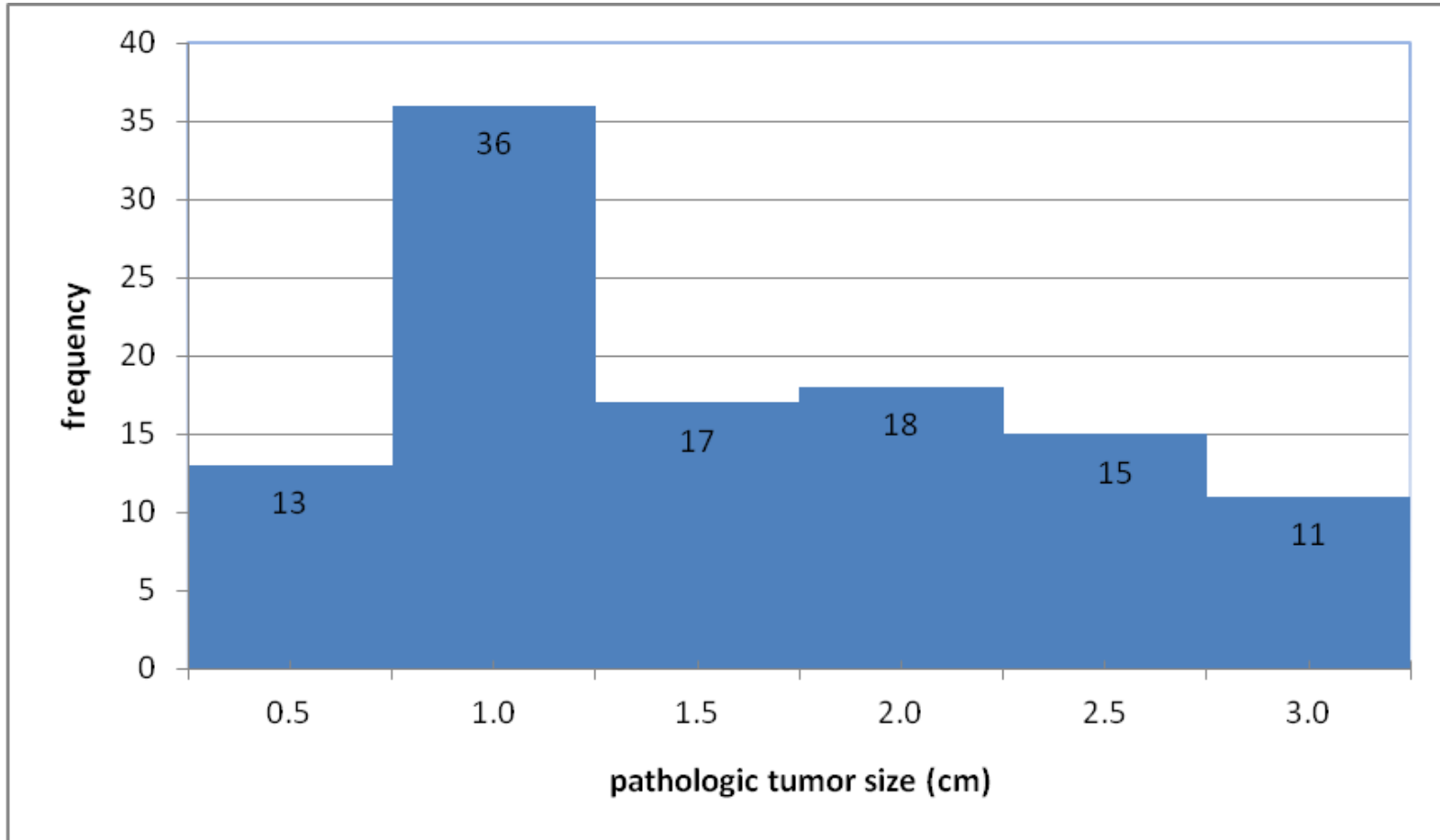
Class interval (Age)	Mid – interval	Frequency Freq (f)	Cumulative Frequency	Relative Frequency R.f	Cumulative Relative Frequency
<b>30 – 39</b>	34.5	<b>11</b>	11	0.0582	0.0582
<b>40 – 49</b>	44.5	<b>46</b>	57	0.2434	-
<b>50 – 59</b>	54.5	-	127	-	0.6720
<b>60 – 69</b>	-	<b>45</b>	-	0.2381	0.9101
<b>70 – 79</b>	74.5	<b>16</b>	188	0.0847	0.9948
<b>80 – 89</b>	84.5	<b>1</b>	189	0.0053	1
<b>Total</b>		<b>189</b>		<b>1</b>	

# Example :

- From the above frequency table, complete the table then answer the following questions:
- 1-The number of objects with age less than 50 years ?
- 2-The number of objects with age between 40-69 years ?
- 3-Relative frequency of objects with age between 70-79 years ?
- 4-Relative frequency of objects with age more than 69 years ?
- 5-The percentage of objects with age between 40-49 years ?

- 6- The percentage of objects with age less than 60 years ?
  
- 7- Variable is .....
- Type of variable is .....
- 8. True class for the third interval (50-59) is .....
  
- 9- The width of the interval (  $W$  ) ?
- 10- Sample size is .....
- 11- The cumulative frequency of fourth interval ?
- 12- The Mid point for fourth interval

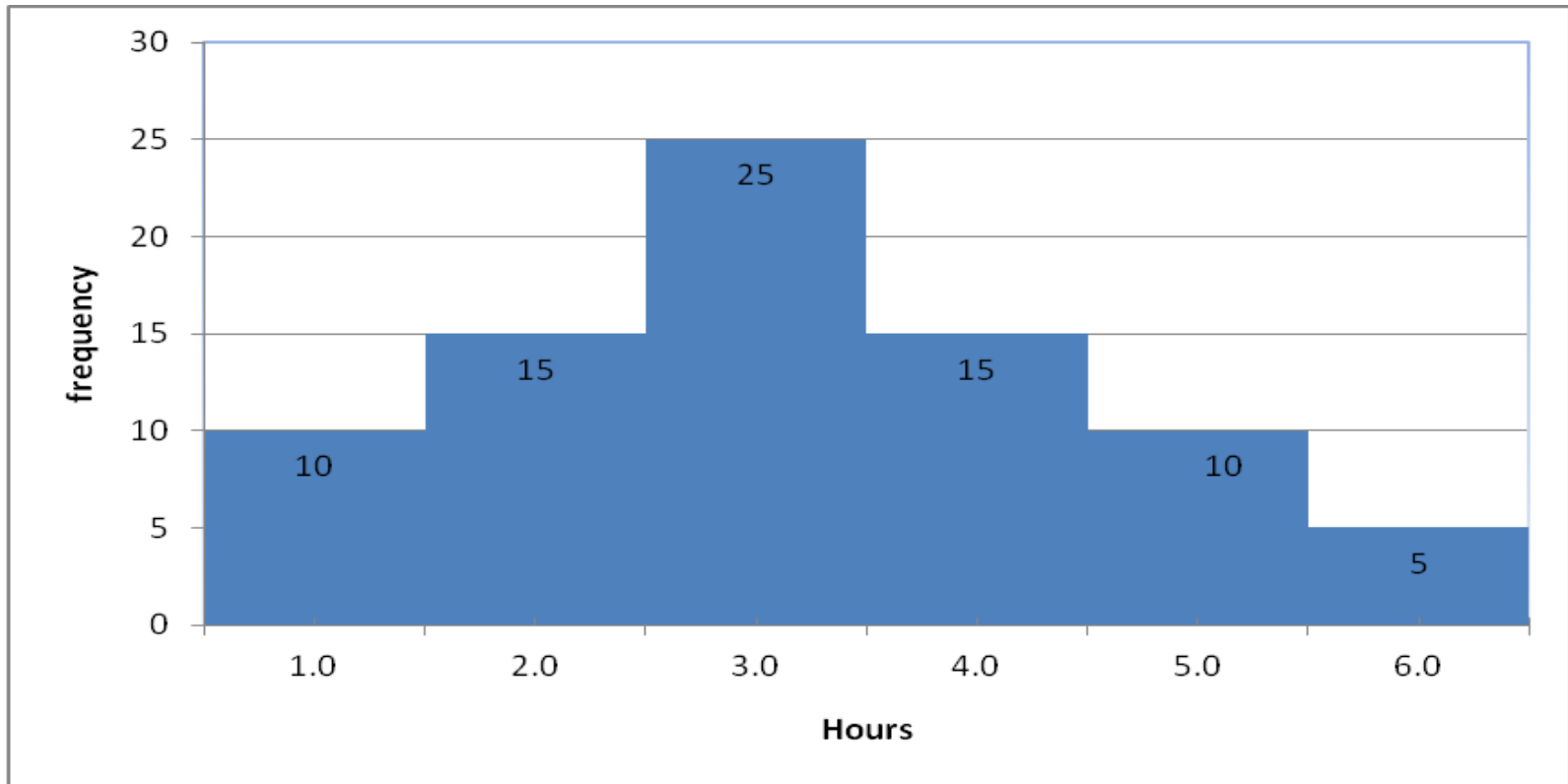
the following histogram show the frequency distribution of pathologic tumor size ( in cm)  
for a sample of cancer patients:



# Answer the following

- 1- The variable is .....
2. The type of the variable is .....
- 3- The sample size is .....
- 4- The name of the chart.....
- 5- The number of cancer patient with lowest Pathologic tumor size is .....
- 6-The percent of cancer patients with approximate level of Pathologic tumor size = 2.....

Q1] For a sample of patients, we obtain the following graph for approximated hours spent without pain after a certain surgery



1) The type of the graph is:

(e) Bar chart (f) polygon (d) histogram (c) line (a) curve (b) not known

2) The number of patients stayed the longest time without pain is:

(f) 10 (e) 15 (d) 6 (c) 5 (b) 80 (a) 1

3) The percent of patients spent 3.5 hours or more without pain is:

(f) 37.5% (e) 68.75% (d) 18.75% (c) 50% (a) 25% (b) 30%

4) The lowest number of hours spent without pain is:

(f) 10 (e) 1 (d) 0.5 (c) 5 (b) 25 (a) 6.5