

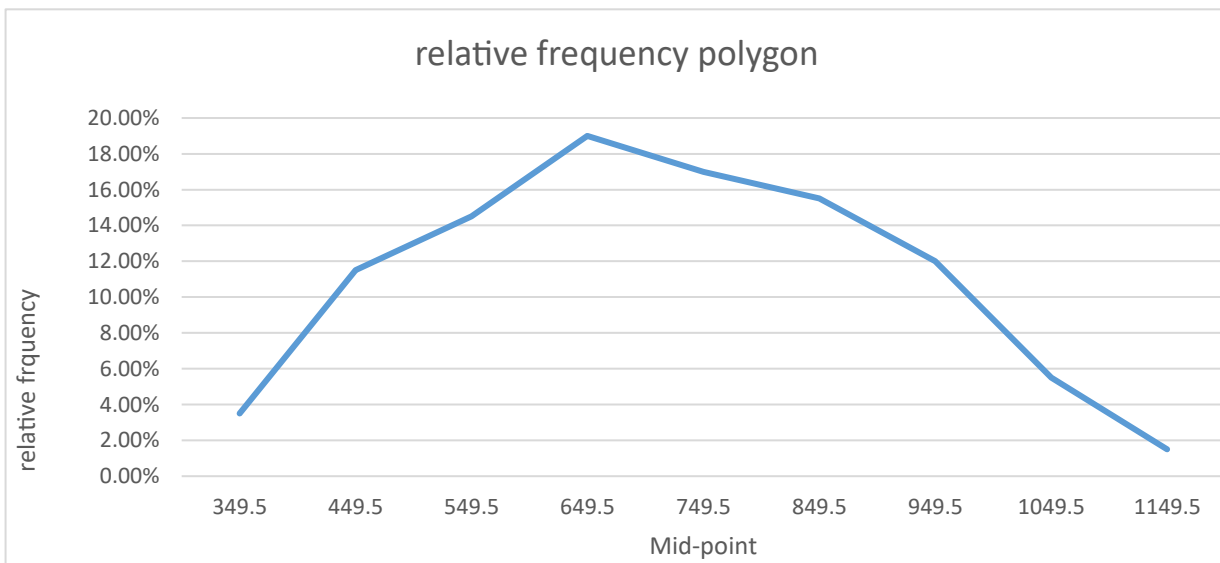
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COURSE: ECO 104
MATRIC NO: 19/SMS01/015

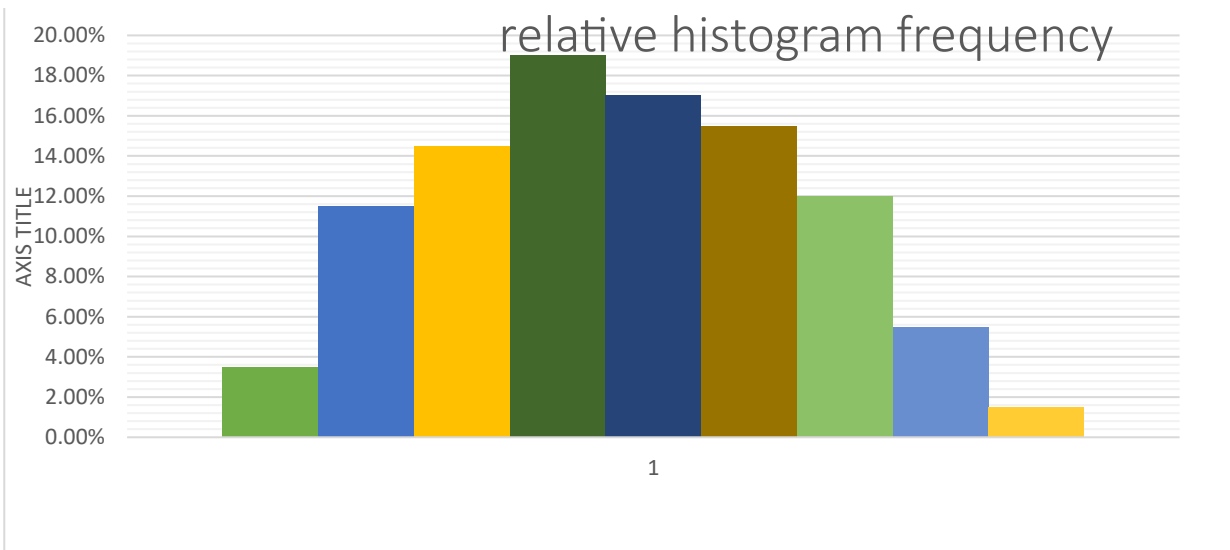
QUESTION 1

- a. 799
- b. 1000
- c. 949.5
- d. 1099.5-1199.5
- e. 100
- f. 76
- g. $62/400 \times 100 = 15.5\%$
- h. $58+46+14 = 118/400 \times 100 = 29.5\%$
- i. $48+22+6 = 76/400 = 19\%$
- j. $58+76+68+62+48 = 312/400 \times 100 = 78$

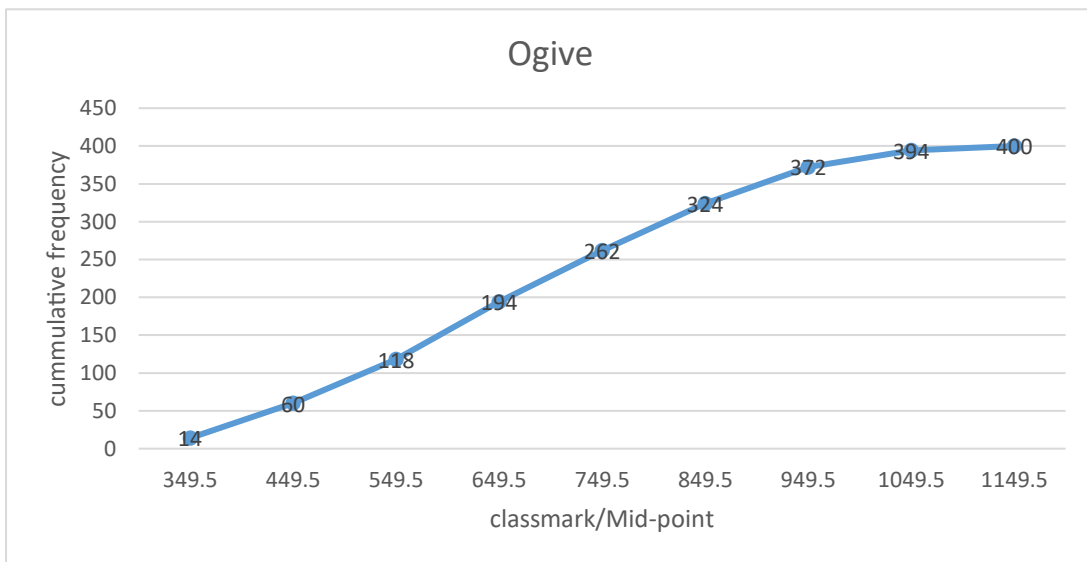
QUESTION 2

class interval	frequency	class boundary	mid-point	relative frequency
300-399	14	299.5-399.5	349.5	3.50%
400-499	46	399.5-499.5	449.5	11.50%
500-599	58	499.5-599.5	549.5	14.50%
600-699	76	599.5-699.5	649.5	19%
700-799	68	699.5-799.5	749.5	17%
800-899	62	799.5-899.5	849.5	15.50%
900-999	48	899.5-999.5	949.5	12%
1000-1099	22	999.5-1099.5	1049.5	6%
1100-1199	6	1099.5-1199.5	1149.5	1.50%





Class Mark	frequency	Cummulative frequency
349.5	14	14
449.5	46	60
549.5	58	118
649.5	76	194
749.5	68	262
849.5	62	324
949.5	48	372
1049.5	22	394
1149.5	6	400



QUESTION 3

Grade	frequency	class boundary
30-39	1	29.5-39.5

40-49	3	39.5-49.5
50-59	11	49.5-59.5
60-69	21	59.5-69.5
70-79	43	69.5-79.5
80-89	32	79.5-89.5
90-100	9	89.5-100.5

a) Quartiles

$$Q1=N/4$$

$$120/4=30$$

$$59.5+15/21*(10)=66.64$$

$$Q2=2N/4$$

$$2*120/4=60$$

$$69.5+24/43*(10)=75.08$$

$$Q3=3N/4$$

$$3*120/4=90$$

$$79.5+11/32*(10)=82.94$$

b) Percentile

$$P10=10N/100$$

$$10*120/100=12$$

$$49.5+8/11*(10)=56.77$$

$$P25=25N/100$$

$$25*120/100=30$$

$$59.5+15/21*(10)=66.64$$

$$P90=90N/100$$

$$90*120/100=108$$

$$79.5+29/32*(10)=88.56$$

$$P75=75N/100$$

$$75*120/100=90$$

$$79.5+11/32*(10)=82.94$$

