Check Your Understanding – Statistics

The table below identifies the key concepts from this unit.
1. Check your understanding by completing these questions.
2. Check your answers in the key provided.
3. In the table below, highlight the questions you got correct.
4. Ask peers/Dr. James about concepts where you can improve.

Key Concepts	Mild	Medium	Spicy
Histograms and Frequency Tables	1,2	3	
Central Tendency (mean, median, mode)	1,2	3	
Broken Line Graph		4	

1. The number of people living in each apartment of an apartment building is recorded and displayed below.

2	4	3	1	0	2	4	5	4	6
4	6	2	5	3	4	2	3	1	3
3	2	1	3	5					

a) **Create a frequency table below**
b) **Create a histogram**
c) **Determine the mean number of people living in each apartment**
d) **Determine the median number of people living in each apartment**
e) **Determine the modal number of people living in each apartment**

# of people living in an apartment		
# people in apt.	# of apts	%
0		
1		
2		
3		
4		
5		
6		
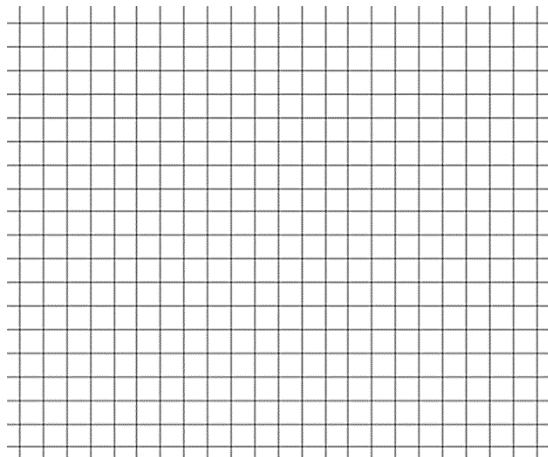
2. The hair color of 24 students was recorded and is shown below.

Blonde	Brown	Blonde	Black	Brown	Blonde
Brown	Blonde	Brown	Brown	Blonde	Red
Brown	Brown	Black	Brown	Brown	Blonde
Blonde	Brown	Brown	Blonde	Brown	Red

a) Create a frequency table
b) Create a histogram
c) Determine the modal hair color

**# of people with each hair color**

Hair color	# of people	%
Blonde		
Brown		
Black		
Red		
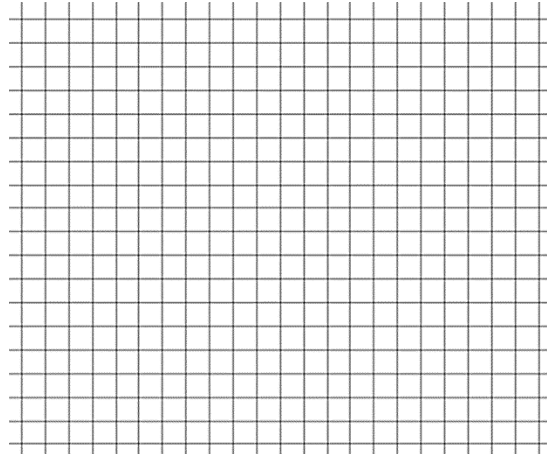
3. Students took a math test, and the results for 30 students are recorded below.

78	60	80	88	78	86	77	60	64	85
70	88	77	45	47	93	56	74	50	83
97	70	94	67	77	84	62	72	82	57

a) Create a frequency table (with interval ranges of 10)
b) Create a histogram (with interval ranges of 10)
c) Determine the modal interval

Math Test Grades

Grades	# of students	%
[40, 50[		
[50,60[		
[60,70[		
[70,80[		
[80,90[		
[90,100[		
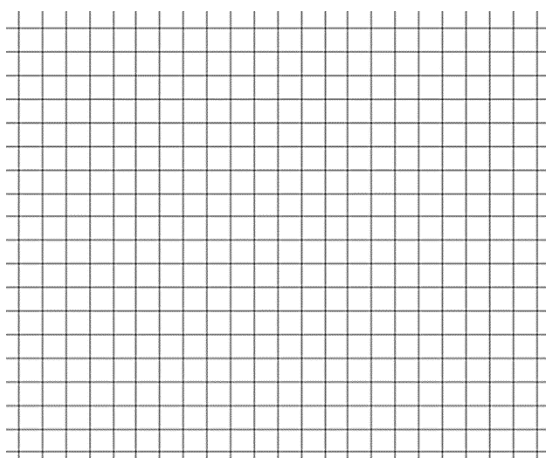
4. An airport surveyed passengers about their age. The results are presented in the frequency table below.

Ages of Passengers at Airport	
Ages	# of passengers
[0, 20[	8
[20,40[	40
[40,60[	67
[60,80[	20
[80,100[	2

Determine the average age of a passenger at the airport.

5. The manager of a café was interested in the amount of sales per hour, for every hour the café is open. The results are presented in the table below. Create a broken line graph to represent this data.

Time	Sales
7:00am	$325
8:00am	$350
9:00am	$250
10:00am	$175
11:00am	$200
12:00 noon	$125
1:00pm	$100
2:00pm	$200
3:00pm	$100
4:00pm	$75
5:00pm	$25