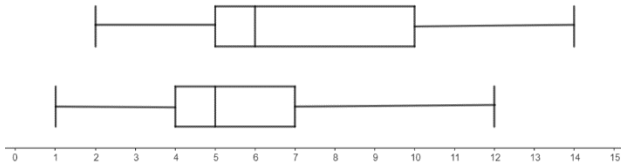**Box Plots – www.m4ths.com – Steve Blades ©**

(1) The box plots below show the performances of 2 difference classes (Class A and B) in a maths test. The test was out of 20.

The Highest score in class A was 12.
(a) label the two box plots A and B
(b) Write down the median score for both classes.
(c) Find the Lower Quartile (LQ) for each class
(d) Find the Upper Quartile (UQ) for each class
(e) HENCE, find the IQR for each class.
(f) Which class has the better average score?
(g) Which class has the most consistent score?
(h) In one class, 75% of students scored 7 or less. Which class was this?

(2) The box plots shows the science test scores of Class A and B.
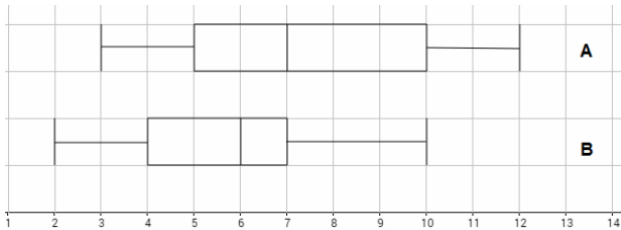
(a) Complete the table below

Class	Lowest Score	LQ	Median	UQ	Highest Score	IQR
A						
B						

(b) On average, which class was better?
(c) Which class was more consistent?

(3) Use the information below to draw 3 box plots.

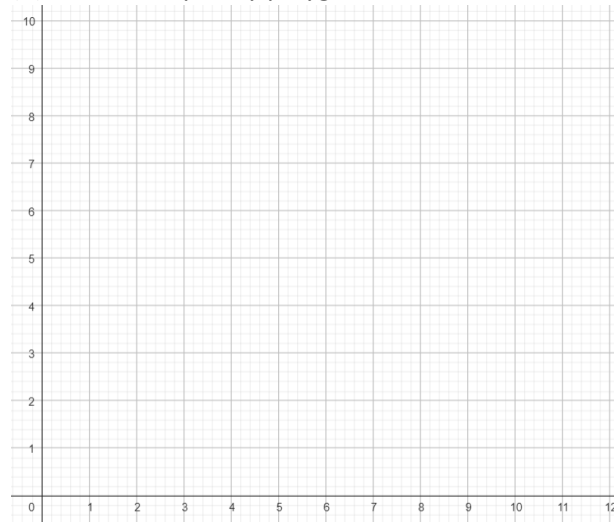|	Lowest Value	Highest Value	Lower Quartile (Q1)	Median (Q2)	Upper Quartile (Q3)	IQR
A	12	92	23	37	54	
B	22	84	37	43		12
C	9	98		28	30	16
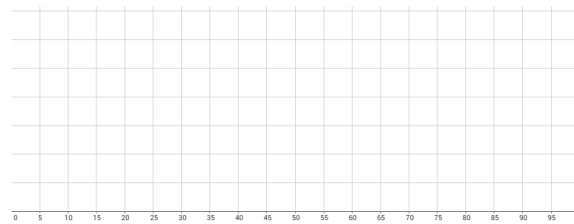
Frequency Polygons

Height	Frequency
$0 < H \leq 4$	8
$4 < H \leq 6$	6
$6 < H \leq 8$	2
$8 < H \leq 12$	4

(1) Draw a frequency polygon on the axis below

Height	Frequency
$0 < H \leq 3$	8
$3 < H \leq 10$	6
$10 < H \leq 16$	2
$16 < H \leq 20$	4

(2) Draw a frequency polygon on the axis below
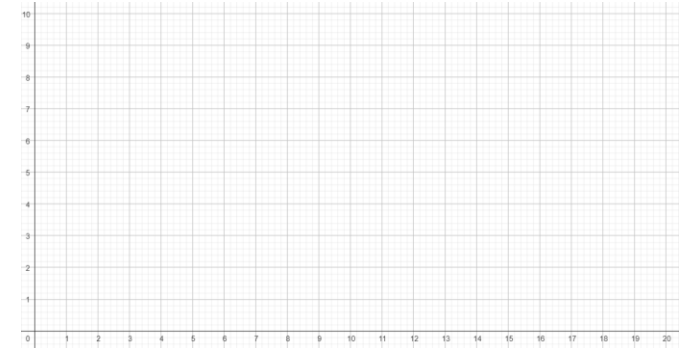
Estimated Mean
(1) Find the estimated mean from the table below

Height	Frequency		
$0 < H \leq 4$	8		
$4 < H \leq 6$	6		
$6 < H \leq 8$	2		
$8 < H \leq 12$	4		

(2) Find the estimated mean from the table below

Height	Frequency		
$0 < H \leq 3$	8		
$3 < H \leq 10$	6		
$10 < H \leq 16$	2		
$16 < H \leq 20$	4		