1. Given the data below,

   (a) determine the following.
   - **(i)** Minimum
   - **(ii)** Maximum
   - **(iii)** Median
   - **(iv)** Lower Quartile
   - **(v)** Upper Quartile

   (b) Determine the five-number summary and present it using set notation.

   (c) Determine the five-number summary and present it in a manner appropriate for publication if the data represents the distance, in miles, that a group of students travels to Framingham State University each day for class.

   Data: 2, 2, 3, 3, 3, 4, 6, 6, 6, 6, 8, 8, 8

2. Your Cultural Anthropology instructor offers you the opportunity to assist her by analyzing some data that she collected between September 25, 1986 and October 18, 1987 regarding the male residents of the Gwaimasi Village in the New Guinea rain forest. Delighted that you can put your knowledge of statistics to use, you accept her offer, and she gives you the data. Examining the data, you find that, for this study period, she has collected information about fifteen (15) male members of the village together with their age, their status in the village, the number of nights that each male spent in the hunting area, and the amount, in kilograms, of food, Pig, Cassowary, Spear Fish, or Hook Fish, that each caught.

Name	Age	Status	Number of Nights in Hunting Area	Pig	Cassowary	Spear Fish	Hook Fish
Bisaeo	45	Married	327	10.9872	0	8.0769	2.4852
Gugwi	45	Married	363	1.452	0	54.0507	13.5762
Wodai	45	Widower	43	0	0	0	12.1174
Mamo	40	Married	310	169.849	107.26	11.687	3.379
Simo	35	Married	295	64.9885	6.49	3.3335	21.8005
Gwase	28	Bachelor/Married	346	99.9594	11.3834	10.3108	12.0062
Tufa	25	Bachelor/Married	155	0	0	2.2475	2.666
Gwuho	25	Bachelor	136	6.2424	0	1.9856	7.0856
Filifi	25	Bachelor	274	289.6728	9.4256	30.688	0.9042
Sinio	22	Married	267	169.9188	43.8681	52.1985	8.01
Maubo	20	Youth	362	32.4714	3.258	16.2176	27.9102
Dogo	15	Youth	314	42.7354	0	11.8064	14.8522
Hegogwa	15	Youth	122	0	0	3.782	15.8722
Gawua	10	Child	263	0	0	0	2.0251
Okre	3	Child	355	0	0	0	0

   (a) What is the median age for the male residents of the Gwaimasi Village in the New Guinea rain forest?

   (b) What is the first quartile and third quartile for the age for the male residents of the Gwaimasi Village in the New Guinea rain forest?

   (c) What is the outliers, if any, for the age for the male residents of the Gwaimasi Village in the New Guinea rain forest?

   (d) Determine the five-number summary for the age of the male residents of the Gwaimasi Village in the New Guinea rain forest. Present the five-number summary as a set and in a publication-ready format.

   (e) Determine the five-number summary for the number of nights that the male residents of the Gwaimasi Village spent in the hunting area. Present the five-number summary as a set and in a publication-ready format.

   (f) Create the Box plot and modified Box plot for the age of the male residents of the Gwaimasi Village in the New Guinea rain forest. As always, these must be publication-ready.

   (g) Create the Box plot and modified Box plot for the number of nights that the male residents of the Gwaimasi Village spent in the hunting area. As always, these must be publication ready.

3. For your summer internship with *the Zoological Society of San Diego*, you are asked to analyze data for the twenty (20) mammals being studied by the Society. For your analysis, you obtain information for the gestation period, in days, the life span, in years, determining both the average life span and the maximum life span, and the average speed, in miles per hour, for these mammals as well as if the mammals are considered to be wild or considered to be predators.

Mammal	Gestation Period	Average Life Span	Maximum Life Span	Average Speed	Wild	Predator
Rabbit	31	5	13	35	No	No
Chipmunk	31	6	8	10	Yes	No
Kangaroo	36	7	24	40	Yes	No
Deer	201	8	20	30	Yes	No
Pig	112	10	27	11	No	No
Squirrel	44	10	23	12	Yes	No
Giraffe	425	10	34	32	Yes	No
Donkey	365	12	47	40	No	No
Zebra	365	15	50	40	Yes	No
Elk	250	15	27	45	Yes	No
Horse	330	20	50	48	No	No
Elephant	660	35	70	25	Yes	No
Hippopotamus	238	41	54	20	Yes	No
Opossum	13	1	5	7	Yes	Yes
Fox	52	7	14	42	Yes	Yes
Cat	63	12	28	30	No	Yes
Dog	61	12	20	39	No	Yes
Cheetah	93	14	20	70	Yes	Yes
Lion	100	15	30	50	Yes	Yes
Grizzly bear	225	25	50	30	Yes	Yes

(a) Determine each of the following for the average speed for the mammals.
- **(i)** Minimum
- **(ii)** Maximum
- **(iii)** Median
- **(iv)** Lower Quartile
- **(v)** Upper Quartile
- **(vi)** Lower Fence
- **(vii)** Upper Fence
- **(viii)** Outliers, if any

(ix) Five-Number Summary (use both formats)

(b) Create the Box plot* and modified Box plot* for the average speed for the mammals.

(c) Determine each of the following for the average life span for the mammals.
- **(i)** Minimum
- **(ii)** Maximum
- **(iii)** Median
- **(iv)** Lower Quartile
- **(v)** Upper Quartile
- **(vi)** Lower Fence
- **(vii)** Upper Fence
- **(viii)** Outliers, if any

(ix) Five-Number Summary (use both formats)

(d) Create the Box plot* and modified Box plot* for the average life span for the mammals.

(e) Determine each of the following for the maximum life span for the mammals.
- **(i)** Minimum
- **(ii)** Maximum
- **(iii)** Median
- **(iv)** Lower Quartile
- **(v)** Upper Quartile
- **(vi)** Lower Fence
- **(vii)** Upper Fence
- **(viii)** Outliers, if any

(ix) Five-Number Summary (use both formats)

(f) Create the Box plot* and modified Box plot* for the maximum life span for the mammals.

(g) Determine each of the following for the gestation period for the mammals.
- **(i)** Minimum
- **(ii)** Maximum
- **(iii)** Median
- **(iv)** Lower Quartile
- **(v)** Upper Quartile
- **(vi)** Lower Fence
- **(vii)** Upper Fence
- **(viii)** Outliers, if any

(ix) Five-Number Summary (use both formats)

(h) Create the Box plot* and modified Box plot* for the gestation period for the mammals.

* As always, these must be publication-ready.