

Download and print the assignment and complete the questions by hand. You may choose one the methods below to submit the assignment:

- 1) scanning a copy (or take digital pictures with digital camera) and submitting the scanned files through Blackboard Assignment Dropbox, or
- 2) deliver a hard copy to Math Department main office at Lincoln Hall, YSU, or my office at Lincoln 623 or
- 3) fax a copy to YSU math department, the fax number is (330) 941-3170, or
- 4) mail a hard copy to Dr. Chang, Math. & Statistics Department, One University Plaza, Youngstown, OH 44555 with post mark on or before the due date.

### **Organize and Display Data**

Data below were collected from a class of 9<sup>th</sup> grade students.

ID	Gender	Height (m)	Weight (kg)	Exercise per week	Daily hours of TV viewing
1	Female	1.52	42.18	4 Days	2 or fewer hours
2	Male	1.62	52.62	5 Days	More than 2 hours
3	Female	1.65	65.77	0 Days	More than 2 hours
4	Female	1.68	113.40	1 Day	More than 2 hours
5	Female	1.57	49.90	1 Day	2 or fewer hours
6	Female	1.60	50.80	0 Days	More than 2 hours
7	Male	1.57	56.70	1 Day	.
8	Male	1.75	49.90	4 Days	More than 2 hours
9	Male	1.68	59.88	4 Days	More than 2 hours
10	Male	1.68	68.95	7 Days	2 or fewer hours
11	Male	1.65	47.63	1 Day	2 or fewer hours
12	Female	1.57	48.54	2 Days	2 or fewer hours
13	Female	1.68	73.94	0 Days	More than 2 hours
14	Male	1.85	104.33	2 Days	More than 2 hours
15	Male	1.68	45.36	7 Days	More than 2 hours
16	Female	1.55	75.30	0 Days	2 or fewer hours
17	Female	1.60	47.63	4 Days	2 or fewer hours
18	Male	1.83	77.11	6 Days	More than 2 hours
19	Female	1.73	58.06	3 Days	2 or fewer hours
20	Female	.	.	2 Days	2 or fewer hours
21	Female	1.57	53.52	6 Days	2 or fewer hours
22	Male	1.88	63.50	5 Days	2 or fewer hours
23	Male	.	.	0 Days	2 or fewer hours
24	Male	1.70	58.97	0 Days	More than 2 hours
25	Male	1.75	96.16	7 Days	2 or fewer hours
26	Male	1.78	56.70	4 Days	2 or fewer hours
27	Female	1.65	58.06	4 Days	2 or fewer hours
28	Female	1.57	44.45	7 Days	More than 2 hours
29	Female	1.60	49.90	3 Days	More than 2 hours
30	Male	1.70	61.24	2 Days	More than 2 hours

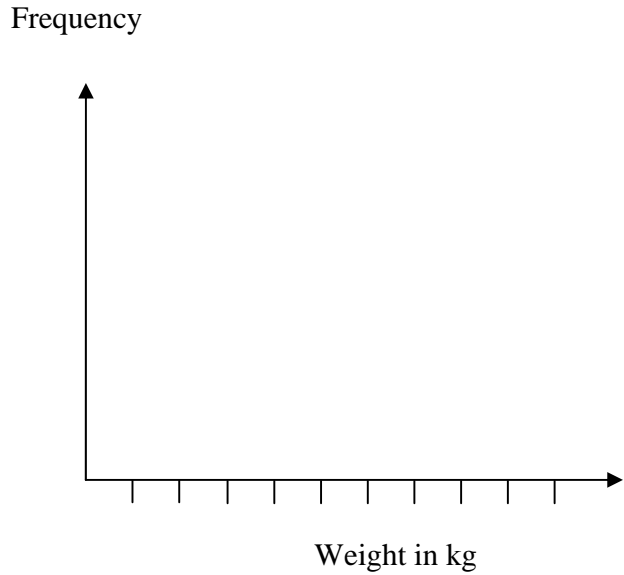
“.” means missing value and no information was given for it.

Use this data to answer questions 1 – 4 in the following pages and use the data in question 5 to do question 5.

(Do all the work by hand, not by computer.)

1. Make a **frequency distribution table** for the **Weight variable** and then make a **histogram** to display the distribution of this variable. (Use a class width of 10.)

Class	Frequency
40 to less than 50	

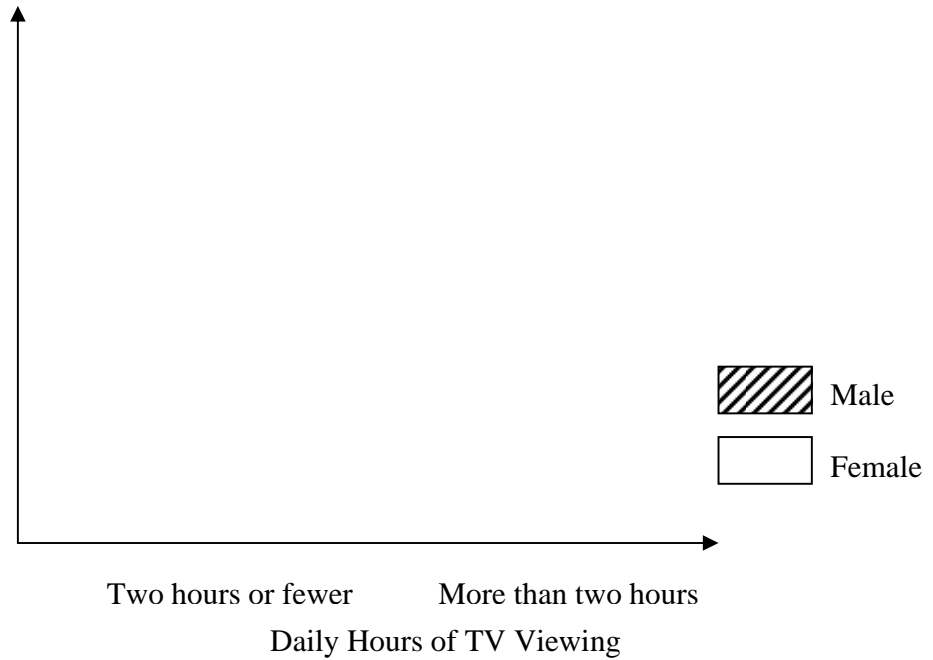


2. Make a **frequency distribution table** for the **gender variable** to see the frequency distribution and then make a **bar chart**.

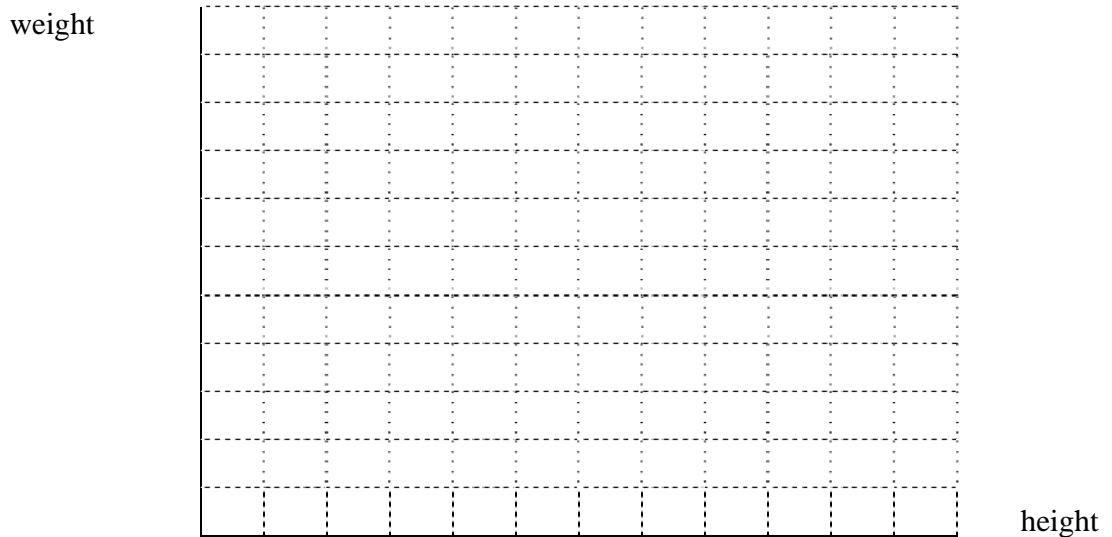
Class	Frequency



3. Make a **cluster bar chart** to examine the correlation between **gender** and **Daily hours of TV viewing** variables. (Use the **Daily hours of TV viewing** variable as the category axis and **gender** variable as the cluster variable.)



4. Make a **scatter plot** to examine the correlation between **weight** and **height** variables, and write a sentence to describe the trend you observed from the scatter plot.



5. A quality control officer recorded the average length for a random sample of 10 of steel frames made from a production line in (inches). The sample was taken one every hour. Produce a time plot to display the trend.

<b>Time</b>	<b>Average Length</b>
8 am	5.1
9 am	4.9
10 am	5.1
11 am	5.2
12 am	5.0
1 pm	5.3
2 pm	5.5
3 pm	5.9
4 pm	6.5
5 pm	7.7
6 pm	9.6

Average Length

