



**Jakarta International
School
6th Grade
Formative Assessment
Graphing and Statistics- Blue**

Name: _____

Date: _____

Score : $\frac{\quad}{42}$

Data collection, presentation and application

Frequency tables.

1) The school magazine at East Durham Middle School conducted a survey to find out movie watching trends. Grade 7E students were asked how many movies they went to during semester one. The data table below shows the results for this class:

student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
movies watched	3	0	4	2	0	3	3	1	2	1	1	2	3	3	2	2	5	0	2	1	4	3	0	4

a. Construct a frequency table of the given data. (2pts)

b. Use your table to find the **fraction** or **frequency percent** of students who:
(2pts)

i) Watched exactly 3 movies _____ ii) Watched at least 3 movies _____

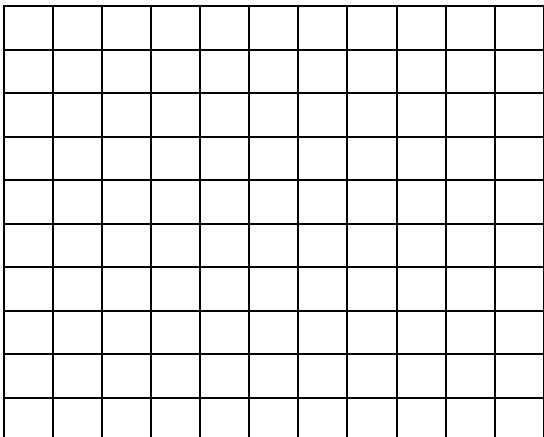
Graphing Points.

2) a. Draw the x-axis and y-axis on the coordinate grid below. (1pt)

b. Show the Origin with letter O (1pt)

c. Number the axes 1 to 8. (1pt)

d. Plot and label the following points: E(7,3) S(0,7) C(5,7) P(1,8) A(4,5) (2pts)

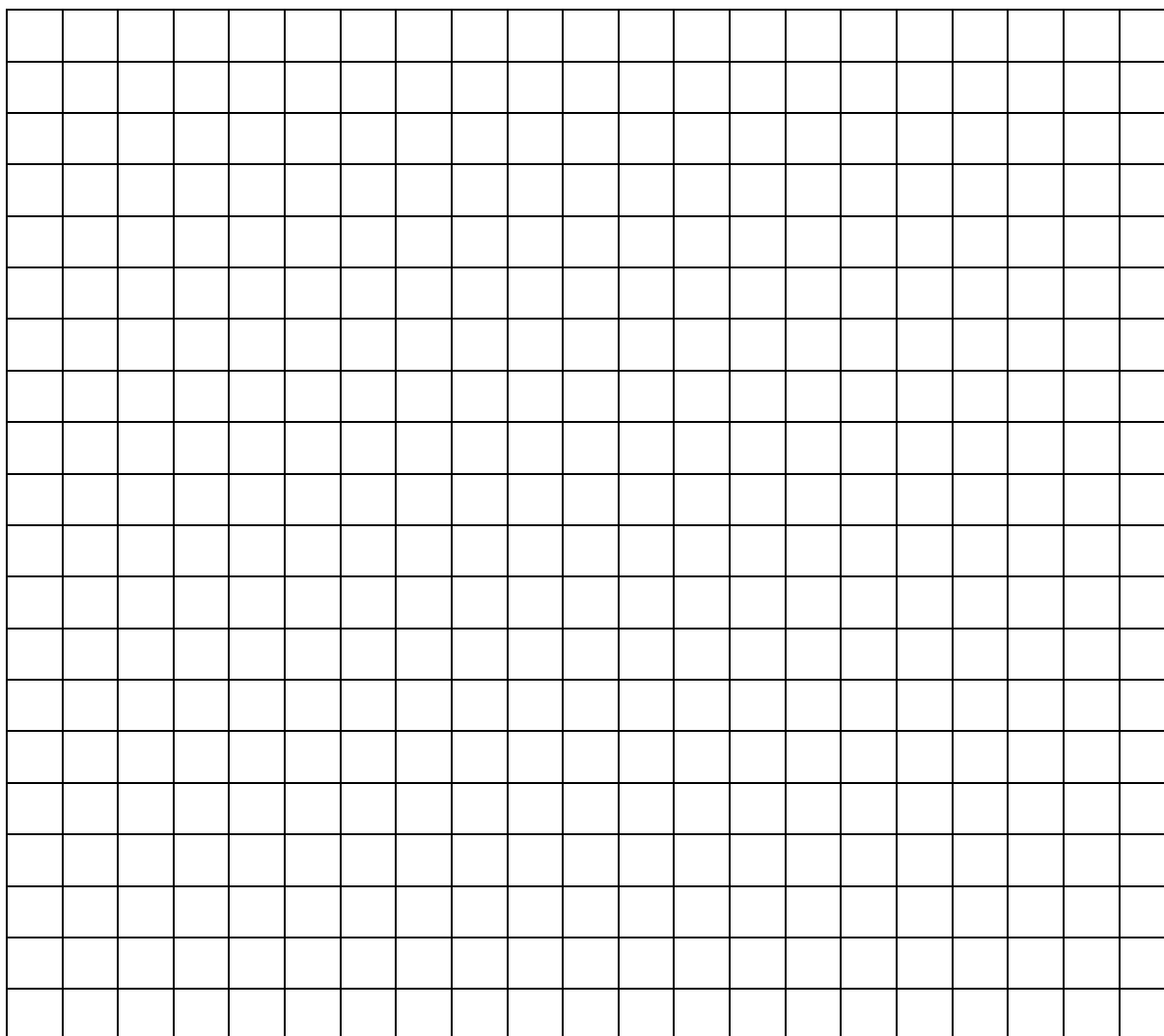


Data Tables and Bar Graphs

2) Six hundred factory workers in the Japan were asked to name their favorite lunch food. 175 liked sushi, 150 liked tepinyaki, 100 fruit salad, 125 plain rice and 50 liked steamed vegetables.

a) Create a data table to represent the results of the survey. (2pts)

b. Draw a bar graph to show the choices of lunch foods. (5pts)



Reading and Interpreting Graphs.

3)

Here are four graphs that tell a story.

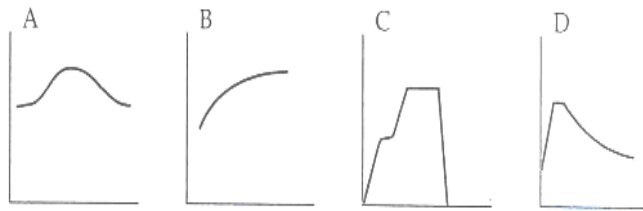
Match each one to one of these situations:

E Water is poured into a kettle, boiled, and then left to cool down.

F A weightlifter raises a bar over his head, holds it steady for a few seconds, and then drops it.

G The prices of groceries are not increasing as fast as they used to.

H People tend to earn more money in their 40s and 50s than they do when they are older or younger.



Graph	A	B	C	D
Situation				

(1pt each)

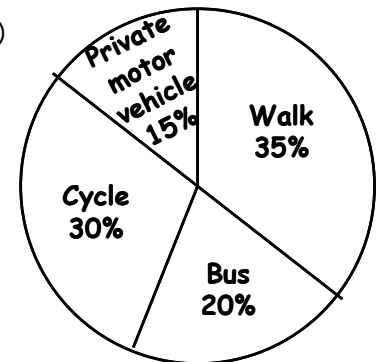
4) The circle graph shows the different ways students at Hogwarts School of Witchcraft & Wizardry travel to school.

a. Which two groups of students are almost the same size? (1pt)

b. There are 100 students at the school, how many travel to school in a private car? (1pt)

c. How many students ride their bicycle to school. (1pt)

d. What is a possible reason that most students walk to school? (1pt)



Measures of Central Tendency.

5) The Mighty Mousetrap Company is owned by two partners and has 13 employees. The partners pay themselves salaries of \$ 15,000 each. And of the 13 employees, 3 earn \$6,000 each, 4 earn \$4,500, and 6 earn \$4,000.

a. Calculate the mean, median, mode and range of the salary amounts. (4pts)

b. In reporting the average salary paid out by the company, the owners want to make the amount appear as large as possible.

Which central tendency average (mean, median or mode) should they choose? (1pt)

c. Give a reason why the partners might want to have the salaries appear as large as possible? (1pt)

f. Which central tendency average do you think represents the typical salary in the Mighty Mousetrap Company? Explain. (2pts)

6) The average height of the starting five in the Bulls basketball team is 192 cm. Four of the players are 194 cm, 196 cm, 190 cm, and 191 cm.

What is the height of the fifth player? (2pts)

7) Find the list of numbers.

There are 7 whole numbers in the group. The least number is 15 and the greatest is 33. The mean is 23. The median is 22. The mode is 19. (2pts)

Vocabulary.

8) Match the vocabulary terms with the definitions. (1pt each)

Definition	Your answer	Vocabulary
A table for organizing a set of data that shows the number of times each item or number appears.		1. Statistics.
A data point that is much different than the others in a set of data.		2. Bar Graph
The difference between the greatest number and the least number in a set of data.		3. Interval
A graph used to compare quantities		4. Frequency table
The study of collecting, analysing and presenting data.		5. Range.
The difference between the values on the y-axis.		6. Outlier