Pretest: DIB 2204 Business Statistics

1. Below are data collected from patients who suffer from migraine headaches. The patients were instructed to take their assigned medicine ABC as soon as their headaches and to record how much time passed before the drugs gave relief.

The data below show the number of minutes that elapsed before a patient got relief.

Medicine ABC: (minutes)

24	16	21	26	28	48	31	24	42	44	53
52	47	44	36	32	33	29	28	26	39	45

- a) Draw stem-and-leaf plot display of the given data above.
- b) Find the mean, median and mode of given data above.
- 2. Mr. David wants to buy a new mobile phone. There are two models: Model A and Model A+, three colors: silver, gold, and red; and three storages: 64 GB, 128 GB, and 256 GB.
 - a) Draw a tree diagram to show the total possible choices.
 - b) How many total choices Mr. David has? Use the fundamental principles of counting to verify your answer.
- 3. If Ms.Linda sleeps well, she always turns up for jogging the next morning. If she drinks coffee in the evening, the probability that she sleeps well is $\frac{1}{5}$. If she does not sleep well, the probability that she turns up for jogging the next morning is $\frac{1}{6}$. Yesterday evening Ms. Linda drank coffee. What is the probability that she will turn up for jogging?
- **4.** To help determine the relationship between the time spent in the study of statistics and students' scores. The teacher took a sample of 10 students and their statistics scores are listed here.

Hours	23	15	17	8	21	13	11	9	18	14
Scores	84	80	82	72	86	78	75	72	83	79

a) Plot a scatter diagram to determine the relationship between the time spent in the study of statistics and students' scores.

b) Find an Estimated Least- Square regression line.

Email address: <u>drkrongthong@gmail.com</u>