

Worksheet 2

1. The following table lists the types of aircraft for the landings that occurred during a day at a small airport. (“Single” refers to single-engine and “Twin” refers to twin-engine).

Twin	Single	Helicopter	Turboprop	Twin	Single
Turboprop	Jet	Jet	Turboprop	Turboprop	Single
Jet	Single	Single	Twin	Twin	Turboprop
Helicopter	Single	Single	Single	Twin	Single
Jet	Jet	Twin	Single	Twin	Twin

- Construct a frequency distribution.
- Using the constructed frequency distribution, construct a bar graph and a pie chart.
- What do you learn about the data using frequency distribution or bar graph or pie chart?

2. Thirty AA batteries were tested to determine how long they would last. The results, to the nearest minute, were recorded as follows:

423, 369, 387, 411, 393, 394, 371, 377, 389, 409, 392, 408, 431, 401, 363, 391, 405, 382, 400, 381, 399, 415, 428, 422, 396, 372, 410, 419, 386, 390

- a. Organize the data using 5 classes.
- b. Construct a frequency histogram using class boundaries in the x-axis and interpret it.
- c. Construct a frequency polygon and interpret it.
- d. Construct an ogive.

3. The following table presents the manufacturer's suggested retail price (in \$1000s) for 2008 base models and styles of BMW automobiles.

28.8	52.0	34.5	49.5	53.8	46.2	50.4	34.9	58.8	36.4	76.6	56.5	54.8	52.4
33.1	34.6	54.4	35.6	83.7	64.9	52.5	39.1	32.7	37.4	76.8	83.9	63.0	44.6

- Organize the data using 5 classes and describe the pattern of the data. (**Hint: data values have one decimal, so upper class limit would be 0.10 less than the lower class limit of the next class**)
- Construct a relative frequency histogram using midpoints in the x-axis.