Math 9   *Name:*_____

8.3 – Sampling Methods   *Date:* _____

When it is not possible to survey the entire Population, we can choose a **SAMPLE** from the Population. Here are some methods for creating the sample:

Simple Random   Each member of the population has an equal chance of being selected.
   Example:

Systematic/Interval Every n^{th} member of the population is selected.
   Example:

Cluster   A random GROUP is selected from the Population and every member of the group is polled.
   Example:

Self-Selected   Only members of the Population that are interested/volunteer are polled.
   Example:

Convenience   Only members of the Population that are convenient to include are selected.
   Example:

Stratified Random   Some members from EACH group of the population are selected.
   Example:

Ex. 1: The Student Council would like to determine if students would like the cafeteria to have longer hours. The following sampling strategies were suggested. For each strategy, determine the sampling method and explain whether it would be appropriate or not.

    a. Every student's name is placed in a box and 100 students are selected randomly.

    b. Every 5th student entering the school in the morning is selected.

    c. Each person on the Leadership Team asks his/her friend.

    d. An announcement is made, inviting students who wish to participate to fill a ballot.

    e. Every student in grade 10 is polled.

    f. 20 students are selected from each grade level.

Ex. 2: A company packages boxes of Granola bars. The quality-control manager wants to tests the quality of the packaging for one week, so he orders that all packages produced on Monday be tested.

a. Is this a good method to ensure quality control? Explain.

b. Suggest 2 other methods of sampling that would be appropriate. Explain why each is appropriate.