1. For each of the following, state the full name of the type of sampling that was used.

    (a) The Office of Residence Life randomly selects seven dormitories, randomly selects twelve hallways from each dormitory, and randomly selects seven students from each hallway to participate in a campus life survey.

    (b) In order to determine customer satisfaction, eBay administers a survey to all customers who will take it.

    (c) During a new student orientation session, the students sit in groups of eight at tables in a room having 108 tables. Sixty tables are randomly selected and all the students at the selected tables complete an orientation survey.

    (d) In order to monitor the quality of DVD's, the quality control officer for the manufacturer checks every twentieth DVD for defects starting with the thirteenth DVD in the production run each day.

    (e) The director of the Customer Service Department for Verizon Fios randomly selects 500 customers from a list of new Fios customers and surveys them regarding their satisfaction with Verizon Fios in comparison with their prior telephone, cable, and Internet services.

    (f) In order to determine satisfaction of its credit card holders whose debt is less than $5000, Bank of America randomly surveys 100 customers whose credit card balance is less than $1000, 100 customers whose credit card balance is $1000 or more but less than $2000, 100 customers whose credit card balance is $2000 or more but less than $3000, 100 customers whose credit card balance is $3000 or more but less than $4000, and 100 customers whose credit card debt is $4000 or more but less than $5000.

    (g) In order to determine the popularity of its products nationwide, Johnson & Johnson Services, Inc., a maker of health care products and pharmaceuticals, subdivides each state into ten equally populated sections, randomly selects six sections from each state, randomly selects twenty chain store types from each section, and randomly selects five stores from each chain store type to determine the reorder frequency for it products at each of these stores.

    (h) To monitor the spread of seasonal flu in the large dormitories at a university, the director of health services randomly selects ten hallways from each dormitory and checks the health records of all the students living in the rooms of these hallways for recent illness and the frequency of the students' use the university's health service center.

    (i) After screening volunteers for eligibility for the study, a researcher uses an alphabetized list to select a sample of participants by randomly choosing a volunteer from among the first seven on the list and, then, taking every seventh name on the list after that.

2. You are hired to analyze the per capita income, in dollars, as well as the percentages of the labor force employed in agriculture, industry, and service occupations for twenty (20) OECD countries for 1960. For this analysis, you decide that it is necessary to create some samples for this data.

    You create two strata, one for per capita income under $900 and one for per capita income of $900 or more. Briefly explain, using no more than three (3) sentences, how to create a stratified sample of ten (10) OECD countries.

COUNTRY	Per Capita Income	Agriculture	Industry	Service
UNITED KINGDOM	1105	4	56	40
BELGUIM	1005	6	52	42
SWITZERLAND	1361	11	56	33
NETHERLANDS	810	11	49	40
CANADA	1536	13	43	45
SWEDEN	1644	14	53	33
LUXEMBOURG	1242	15	51	34
WEST GERMANY	1035	15	60	25
DENMARK	1049	18	45	37
FRANCE	1013	20	44	36
NORWAY	977	20	49	32
AUSTRIA	681	23	47	30
ICELAND	839	25	47	29
ITALY	504	27	46	28
JAPAN	344	33	35	32
IRELAND	529	36	30	34
SPAIN	290	42	37	21
PORTUGAL	238	44	33	23
GREECE	324	56	24	20
TURKEY	177	79	12	9