

1. 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.

Create each sample listed below; use a random digits table when necessary. Provide all information necessary to reproduce your sample.

COUNTRY	Per Capita Income	Agriculture	Industry	Service
UNITED KINGDOM	1105	4	56	40
BELGIUM	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

- (a) Create a systematic sample of five (5) OECD countries. State the names of the countries in the sample.
- (b) Create a systematic sample of eight (8) OECD countries. State the names of the countries in the sample.
- (c) Create a simple random sample of five (5) OECD countries. State the names of the countries in the sample.
- (d) Create a simple random sample of eight (8) OECD countries. State the names of the countries in the sample.
2. Identify the type of sampling that is used for each of the given scenarios. State the *full* name of the sampling method that was used.
- (a) The Registrar randomly selects twelve course sections from among the courses offered during the spring semester and then randomly selects five students from each section to participate in a registration survey.
- (b) The Director of Orientation uses random numbers to select a sample of 150 students who attended new student orientation sessions during the past four years to respond to a survey about student and faculty participation in orientation sessions.
- (c) The Dean of Students gets a sample of 120 students to participate in a survey about student attitudes toward the University drinking policy by randomly selecting 30 freshmen, 30 sophomores, 30 juniors, and 30 seniors.
- (d) The Chair of the Communication Arts department uses an alphabetized list of Communication Arts majors to select a sample of students by randomly choosing a student from among the first ten and then taking every tenth name on the list after that.
- (e) The editor of the *Gatepost* surveys students eating lunch in the dining commons regarding topics for future articles.
- (f) The Office of Residence Life and Housing conducts an on-campus housing satisfaction survey by randomly selecting fifteen hallways from among all the hallways in the dormitories and having all the students living on these hallways complete a questionnaire.
- (g) A restaurant collects comment cards for all diners willing to complete them.
- (h) In order to determine customer opinion of their self-checkout system in New England, the regional manager of *Stop & Shop* has the checkout system programmed to initiate a short on-screen questionnaire to every fiftieth self-checkout customer throughout the region on a particular day beginning with the twenty-seventh customer.
- (i) The Director of Dell Customer Service randomly selects 500 students from a list of Framingham State University students who purchased Dell computers directly from Dell during the past four years to respond to a survey about the quality of Dell customer service and their satisfaction with their Dell computer.