

DATA INTERPRETATION - LEVEL 2
STUDY GUIDE
& SAMPLE TEST QUESTIONS

VERSION 3



COUNTY OF
LOS ANGELES



Los Angeles
County
Human Resources
YOUR CAREER STARTS HERE.



WELCOME

Thank you for your interest in employment with the County of Los Angeles. This booklet is designed to familiarize and assist you with preparing for tests containing multiple-choice data interpretation items. The sample questions provided in this study guide are intended to give you an idea of the kinds of data interpretation items you may encounter in County tests. However, it is important to note that actual test questions will vary in format, content, and level of difficulty, depending on the job class being tested.

ABOUT THE COUNTY'S EXAMINATIONS

As an Equal Opportunity Employer, the County of Los Angeles takes steps to ensure that our exam content is job-related. We conduct studies to determine the knowledge, skills, abilities, and personal characteristics that are essential to satisfactorily perform the duties of the job. These studies assist us in developing the content of our examinations. Pre-employment testing provides us with an objective and cost-effective means to assess the qualifications of our applicants.

HOW SHOULD I PREPARE FOR THE WRITTEN TEST?

To prepare for the written test, you should study the concepts assessed in each section. It is likely that there will be several sections to the test in addition to data interpretation; thus, it is to your benefit to carefully read the job bulletin to determine the knowledge, skill, and ability areas the written test will cover. In addition, it is important that you read the entire written test notice for the location and time of the test as well as for parking instructions and other important information. Pay special attention to whether testing aids/materials such as hand-held calculators are allowed in the written test. If the test notice indicates that testing aids/materials are allowed, then you are strongly advised to bring these with you, as they will not be provided.

On test day, it is recommended that you arrive 15 minutes prior to the test's starting time, wear comfortable clothes, bring an accurate watch, and make sure you are well-rested. Also, remember to bring your test notice and a picture I.D. such as a driver license, or you may not be admitted into the test!

NOTE: Applicants who require special testing arrangements such as readers or interpreters must provide seven (7) days advance notice of their disability and requested accommodation. Check the front side of the job bulletin for telephone numbers to call to make disability accommodation requests. The County will attempt to meet reasonable accommodation requests whenever possible.

TEST-TAKING TIPS

Most County tests have a set time limit, so it is important that you work quickly, but not so fast as to become careless. Always read all the possible choices before marking your answer. If you don't know the answer to a problem, it is usually best to skip it and move on to the others. Note that on most County tests, your score is based on the number of correct responses. If you are not sure of the answer to a problem, eliminate the answers you believe are wrong, and mark the choice that is your best response. Above all, budget your time, pace yourself, and avoid getting bogged down on any single question.

Interpreting Policies

INSTRUCTIONS: For questions 1 and 2, refer to XYZ County Bereavement Leave Policy. NOTE: actual test questions will vary in format, content, and level of difficulty.

XYZ COUNTY, STATE OF CALIFORNIA

BEREAVEMENT LEAVE POLICY

It is the purpose of this policy to establish guidelines for employees who need to be absent from work due to the loss of a loved one.

Bereavement Leave policies apply to all employees paid by XYZ County, except:

- a. Personnel employed in XYZ County Office of Board of Supervisors.
- b. Persons providing services through contractual agreement such as court appointed attorneys, medical doctors, consultants, or others paid on a fee basis.
- c. Temporary employees

A permanent Full-Time or permanent Part-Time employee will be allowed an absence of three (3) days with pay as bereavement leave, not to be deducted from Sick Leave, for the death of any member of his immediate family.

Immediate family is defined as follows: mother, father, sister, brother, wife, husband, son, daughter, mother-in law, father-in-law, grandparents, grandchild, brother-in-law, and sister-in-law.

The Bereavement Leave policy also allows for the following:

- One (1) day shall be granted for the death of an aunt or uncle.
- Two (2) additional days shall be allowed in cases in which the deceased is a member of the employee's household.
- One (1) additional day shall be allowed in cases in which the funeral services are held outside of the State of California.

A bereavement leave may be extended without pay for additional days due to exceptional circumstances. Such extensions must be approved by the elected official/department head.

1. Amy Sanchez is a full-time, permanent employee of XYZ County. Her uncle passed away. The funeral will be held in the state of Florida. What is the maximum number of paid days of bereavement leave she may take?

- A. 1
- B. 2
- C. 3
- D. 4

2. Robert Williams is a part-time, permanent employee of XYZ County Office of Board of Supervisors. His wife who resided with him, passed away. The funeral will be held in XYZ County. What is the maximum number of paid days of bereavement leave he may take?
- A. 0
 - B. 1
 - C. 3
 - D. 5

INSTRUCTIONS: For questions 3-6, refer to XYZ County Sick Leave Policy displayed in **Attachment A** on page 5. NOTE: actual test questions will vary in format, content, and level of difficulty.

3. Toni Ton has been a full-time, permanent employee of XYZ County since January 5, 1985. She is retiring tomorrow and still has 1040 hours of Sick Leave accrued. Assuming that she earns \$15.00 per hour, she is eligible to receive a cash payment of
- A. \$4231.00.
 - B. \$4368.00.
 - C. \$4404.00.
 - D. \$4572.00.
4. Jasmine Brown is celebrating her one-year anniversary as a full-time employee of XYZ County. During her employment, she has used only two days of Sick Leave. How many hours of accrued Sick Leave does she currently have?
- A. 32 hours
 - B. 56 hours
 - C. 74 hours
 - D. 80 hours
5. Brett Smith has been a 1/2-time employee of XYZ County since June 1, 2001. If he does not use any Sick Leave, how many years would it take him to accrue the maximum number of hours of Sick Leave?
- A. 8 years
 - B. 9 years
 - C. 10 years
 - D. 11 years
6. Nick Alvarez has been a 3/4-time employee of XYZ County for eight years. If he has used 21 days of Sick Leave, how many days of Sick Leave does he currently have?
- A. 47
 - B. 51
 - C. 62
 - D. 75

Attachment A

XYZ COUNTY - SICK LEAVE POLICY

A. Eligible Employees

Only regular full-time and part-time employees who work twenty (20) hours or more per week are eligible for paid Sick Leave.

B. Personal Illness or Injury

Time off due to personal illness or injury (including disability due to pregnancy and childbirth), and other related medical conditions may be charged to Sick Leave. Sick Leave shall only be granted in eight (8) hour increments, to equal one (1) working day.

C. Accrual Rate

Eligible employees accrue Sick Leave each pay period at an hourly rate, not to exceed the pay period accrual rates defined in the chart below. Eligible employees who are paid for a full pay period accrue Sick Leave for the pay period according to the following schedules. If an employee does not work a full pay period, the employee's Sick Leave is prorated for the hours worked.

Employment Status	Hours Accrued
Full-Time	8 hours/month
3/4-Time	6 hours/month
1/2-Time	4 hours/month

D. Maximum Allowable Accruals

Unused Sick Leave hours accrued may not at any point in time exceed the following maximum limits:

Employment Status	Limits
Full-Time	1,040 hours
3/4-Time	780 hours
1/2-Time	480 hours

E. Sick Leave Payment upon Retirement

Immediately upon retirement or death, an employee is entitled to receive cash payment for all hours of unused Sick Leave at a rate equal to 28% of his hourly wage multiplied by the number of hours of Sick Leave, not to exceed 1040 hours. Partial hours are rounded to the nearest full hour.

INSTRUCTIONS: For questions 7-10, refer to XYZ County Program Assistance Worker displayed in **Attachment B** on page 8. Assume that all individuals are XYZ County residents when formulating your responses. NOTE: actual test questions will vary in format, content, and level of difficulty.

7. Ann McIntyre is a 64 year old woman living alone in an apartment. Her monthly income consists of \$950, and her personal assets total \$1,600. Based ONLY on this information, she could qualify for
 - A. Food Stamps and Adult Day Services Programs.
 - B. Medical Care and Adult Day Services Programs.
 - C. Food Stamps and Energy Assistance Programs.
 - D. Food Stamps, Energy Assistance, and Senior Employment Assistance Programs.

8. Esther Clark is a 67 year old woman who lives with her sister in the house they jointly own. Their monthly income consists of \$1,025 per month, and her personal assets total \$80,000. Based ONLY on this information, she could qualify for
 - A. Medical Care, Food Stamps, Energy Assistance, Adult Day Service, and Pharmaceutical Assistance Programs.
 - B. Energy Assistance, Weatherization, Senior Employment Assistance, Adult Day Service, and Pharmaceutical Assistance Programs.
 - C. Medical Care, Energy Assistance, Weatherization, Senior Employment Assistance, and Pharmaceutical Assistance Programs.
 - D. Medical Care, Food Stamps, Energy Assistance, Weatherization, Senior Employment Assistance, Adult Day Service, and Pharmaceutical Assistance Programs.

9. Wes Byers is a 34 year old man who is blind. He lives alone in an apartment. His monthly income consists of \$875, and his personal assets total \$2,300. Based ONLY on this information, he could qualify for
 - A. Food Stamps and Energy Assistance Programs.
 - B. Energy Assistance and Pharmaceutical Assistance Programs.
 - C. Food Stamps, Energy Assistance, and Weatherization Programs.
 - D. Medical Care, Energy Assistance, and Pharmaceutical Assistance Programs.

10. Edward Armstrong is a 70 year old man who lives alone in a home he owns. His yearly income consists of \$12,900, and his personal assets total \$210,000. Based ONLY on this information, he could qualify for
 - A. Food Stamps and Energy Assistance Programs.
 - B. Energy Assistance and Weatherization Programs.
 - C. Energy Assistance and Adult Day Services Programs.
 - D. Energy Assistance, Weatherization, and Pharmaceutical Assistance Programs.

Attachment B

XYZ COUNTY PROGRAM ASSISTANCE WORKER

The XYZ County Social and Community Services Agency offers programs for residents in need of public assistance. A Public Assistance Worker is responsible for determining whether a resident would be eligible for agency programs based on the income and individual program requirements displayed below.

PROGRAM INFORMATION

Applicants for public assistance must be residents of XYZ County. Income counted in determining eligibility includes salary, wages, tips, income from rental property, Social Security, pensions, dividends, alimony, and child support. Applicants must meet program eligibility guidelines to be considered for assistance. Income listed under the Eligibility Guidelines is the **maximum** amount allowable to qualify for the program.

PROGRAM	DESCRIPTION	ELIGIBILITY GUIDELINES
Medical Care	Provides medical assistance to senior citizens (age 65 and older) or disabled residents.	<ul style="list-style-type: none"> ✓ Age 65 and older, or disabled ✓ 1 person household income of \$773 per month ✓ 2 person household income of \$1035 per month ✓ Add \$262 income per month for each additional member of household
Food Stamps	Provides financial assistance with food purchases.	<ul style="list-style-type: none"> ✓ 1 person household income of \$960 per month and less than \$2,000 in personal assets ✓ 2 person household income of \$1,294 per month and less than \$3,000 in personal assets
Energy Assistance	Provides financial assistance with heating bills.	<ul style="list-style-type: none"> ✓ Age 60 and older, or disabled ✓ 1 person household income of \$1,123 per month ✓ 2 person household income of \$1,515 per month ✓ Add \$393 income per month for each additional member of household
Weatherization	Provides financial assistance in weatherizing or insulating a home or replacing a heating system.	<ul style="list-style-type: none"> ✓ Must meet eligibility requirements for Energy Assistance Program ✓ Must own the property requesting weatherization
Senior Employment Assistance	Assists older adults in finding employment.	<ul style="list-style-type: none"> ✓ Age 55 and older ✓ 1 person household income of \$11,225 per year ✓ 2 person household income of \$15,150 per year ✓ Add \$3,025 income per year for each additional member of household
Adult Day Services	Provides financial assistance for people looking for an alternative to nursing home placement.	<ul style="list-style-type: none"> ✓ Age 60 and older ✓ Less than \$10,000 in personal assets ✓ 1 person household income of \$739 per month
Pharmaceutical Assistance	Provides financial assistance for purchasing prescription drugs.	<ul style="list-style-type: none"> ✓ Age 65 and older, or disabled and over 16 years of age ✓ 1 person household income of \$17,720 per year ✓ 2 person or more household income of \$23,880 per year

Interpreting Graphs

INSTRUCTIONS: For questions 11-15, refer to the graphs displayed in **Attachment C** on page 9. Refer to "About Graphs" on page 10 for information on graphs and their uses. NOTE: actual test questions will vary in format, content, and level of difficulty.

11. Compared to the previous year, in what year did the Health Department more than double its number of employees participating in Community Service Week?
 - A. 1999
 - B. 2000
 - C. 2001
 - D. 2002

12. During 2002 Community Service Week, how many more employees volunteered at the library than cleaned parks?
 - A. 200
 - B. 275
 - C. 325
 - D. 450

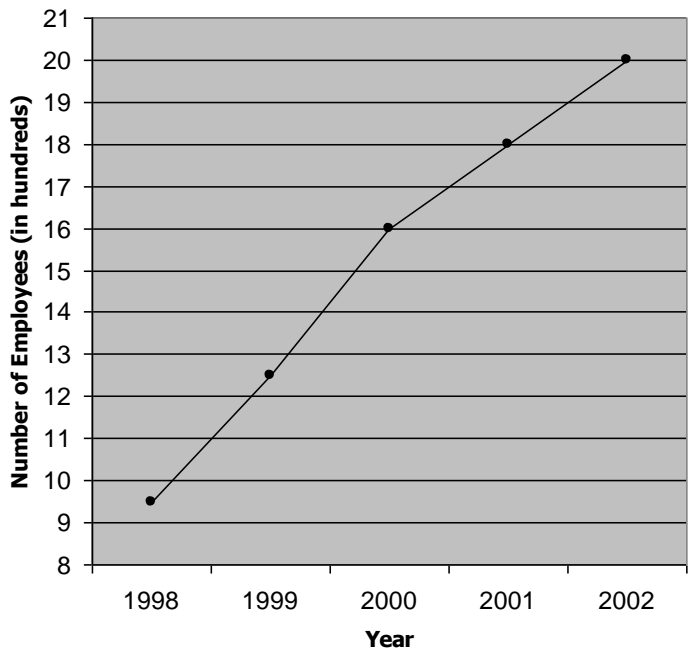
13. What percentage of employees who volunteered during 2002 Community Service Week planted trees?
 - A. 20%
 - B. 25%
 - C. 30%
 - D. 35%

14. If all the employees who painted during 2002 Community Service Week were from the Public Safety Department, how many remaining Public Safety employees participated in other events?
 - A. 100
 - B. 125
 - C. 175
 - D. 250

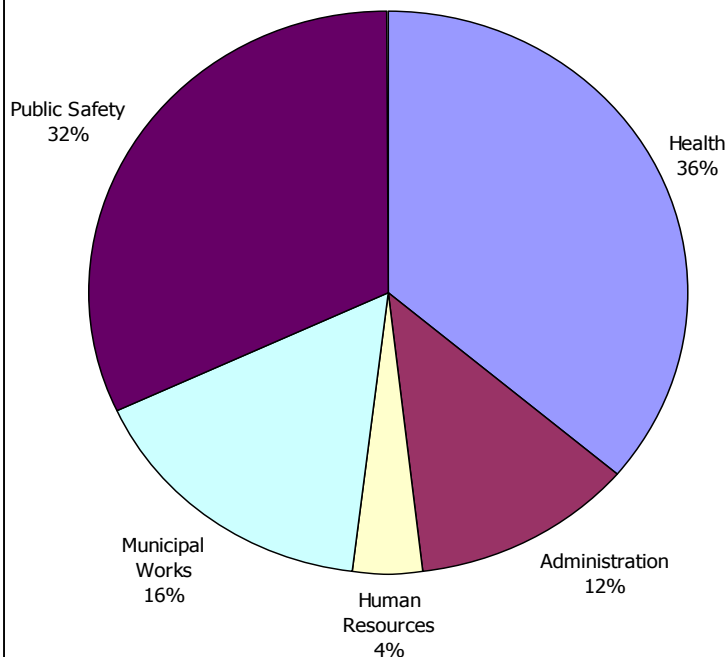
15. Of the following, which Doheny County department had the highest percentage of its employees participating in 2002 Community Service Week?
 - A. Health
 - B. Public Safety
 - C. Municipal Works
 - D. Human Resources

Attachment C

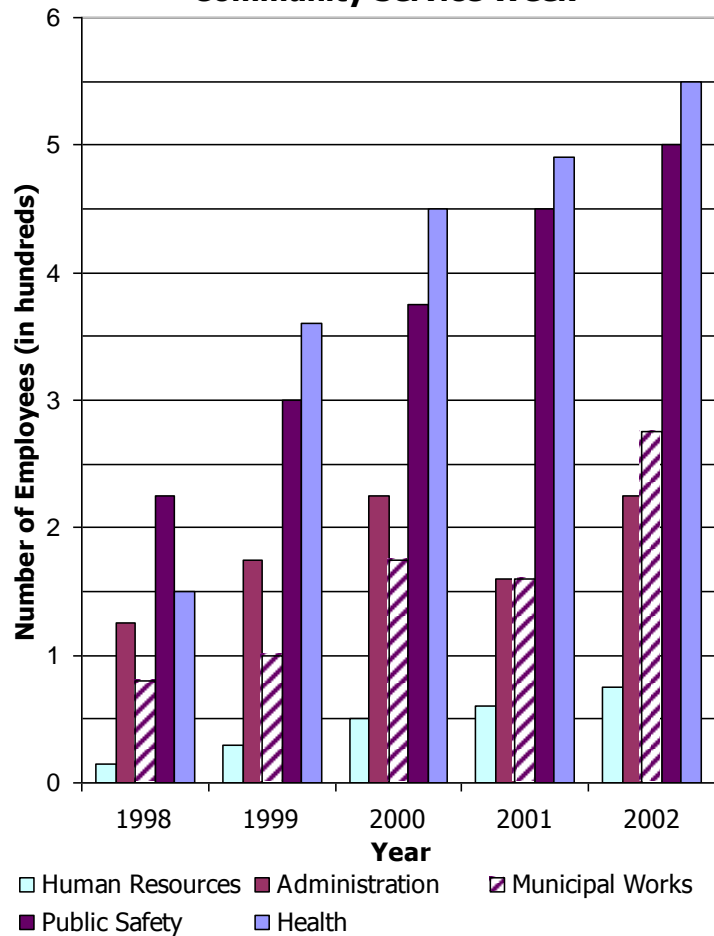
I. Number of Doheny County Employees by Year



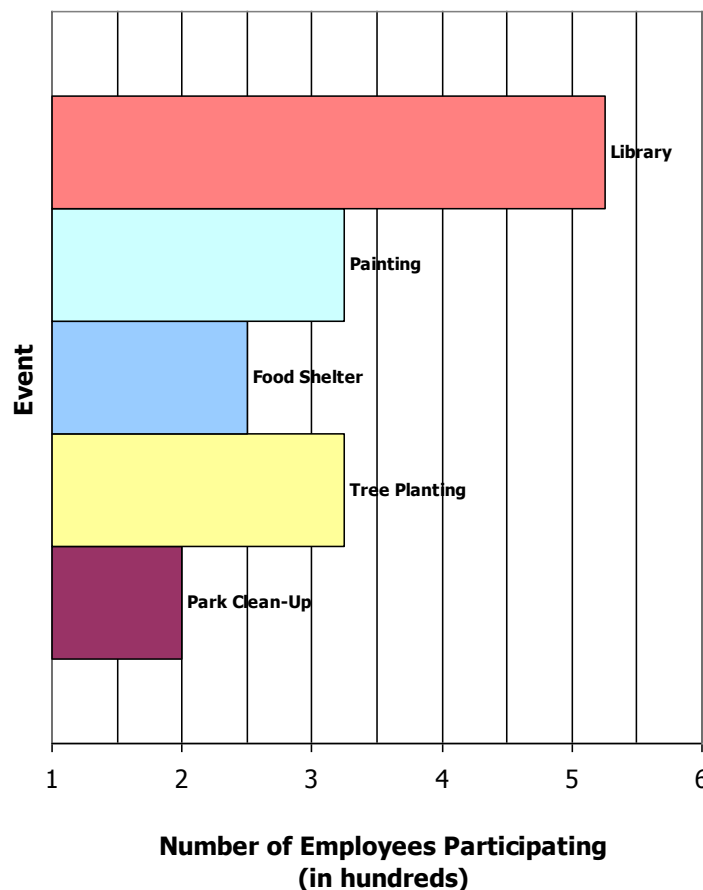
II. Percentage of Doheny County Employees by Department - Year 2002



III. Number of Doheny County Employees Participating in Annual Community Service Week



IV. Record of Participation in 2002 Community Service Week Events

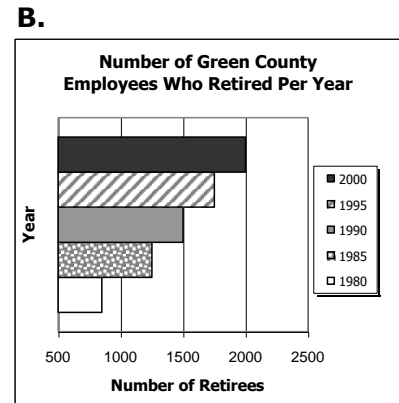
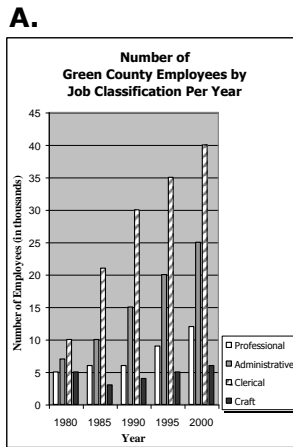


ABOUT GRAPHS

Graphs and charts are used to summarize information in a visual format. Although there are many kinds of graphs, three styles used commonly in business are **bar graphs**, **line graphs**, and **pie charts**, pictured and described below.

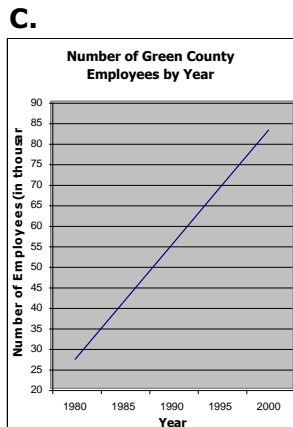
BAR GRAPHS

Bar graphs are charts whose lengths are proportional to specific quantities. They are used primarily for purposes of comparing frequencies of different characteristics of data, as illustrated in the examples to the right. Note that example "A" compares the frequency of employment in different job classifications for the years 1980-2000. Example "B" compares the frequency of retirees for the years 1980-2000.



LINE GRAPHS

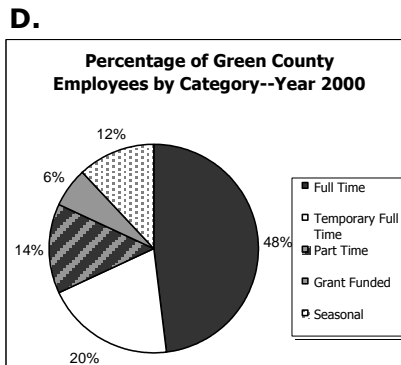
Line graphs are similar to bar graphs, except that the frequency of a given variable is represented by points that lie along a line. As illustrated in example "C," a point on the line represents the number of Green County employees for each of the years 1980-2000. A look at the overall data indicates an upward trend.



PIE CHARTS

Pie charts are circular graphs whose "slices" are proportional in angle and area to the relative size of the quantities represented.

As illustrated in example "D," it is fairly easy to tell that the largest percentage of Green County employees in the year 2000 was full-time, while the next largest percentage was temporary full-time.



Answers & Explanations to Data Interpretation Sample Questions

1. The correct answer is B. To solve:
 - Based on the Bereavement Leave policy, one day is allotted for the death of an uncle.
 - One additional day is allotted for attending a funeral out-of-state.
 - Therefore, Amy will receive two days of paid Bereavement Leave.

2. The correct answer is A. To solve:
 - Based on the Bereavement Leave policy Part "a," persons employed in XYZ County Office of Board of Supervisors are not covered under the policy.
 - Robert works for the XYZ County Office Board of Supervisors.
 - Therefore, Robert is not eligible for Bereavement Leave.

3. The correct answer is B. To solve:
 - Based on Sick Leave policy section E (Sick Leave Payment Upon Retirement), Toni is entitled to cash payment for unused sick time.
 - Multiply her hourly rate of pay (\$15.00) by .28 (28%) to determine how much she will be paid for each hour of unused Sick Leave (\$4.20).
 - Multiply \$4.20 by the number of unused Sick Leave hours (1040).
 - This calculation yields a product of \$4368.00.

4. The correct answer is D. To solve:
 - Based on Sick Leave policy section C, full-time employees are entitled to 8 hours of Sick Leave per month.
 - Multiply 8 hours by 12 months (1 year) to calculate how much Sick Leave Jasmine will accrue per year (96 hours).
 - She has used 2 days of Sick Leave, which equals 16 hours.
 - Subtract 16 hours from 96 hours to determine the number of hours of Sick Leave she will have at her one-year anniversary (80 hours).

5. The correct answer is C. To solve:
 - Based on Sick Leave policy section C, 1/2-time employees are entitled to 4 hours of Sick Leave per month.
 - Based on Sick Leave policy section C, 480 hours of Sick Leave is the maximum amount that a 1/2-time employee can accrue.
 - Multiply the hours accrued per month (4) by 12 months to determine how many hours can be accrued in 1 year (48 hours).
 - Divide the maximum allowable accrual by the yearly accrual rate ($480 \div 48$) to equal 10, which is the number of years it will take to reach the maximum amount of Sick Leave allowable.

6. The correct answer is B. To solve:
- Based on Sick Leave policy section C, $\frac{3}{4}$ -time employees are entitled to 6 hours of Sick Leave per month.
 - Multiply 6 hours by 12 months to calculate how much Sick Leave Nick will accrue per year (72 hours).
 - Multiply 72 hours by 8 (the total amount of years he has been an employee), which is a total of 576 hours accrued.
 - Divide 576 hours by 8 (hours in a day) to convert total hours of Sick Leave into total days of Sick Leave, which equals 72 days accrued.
 - Subtract the 21 days of Sick Leave he has used from the total days of Sick Leave accrued (72 – 21), which leaves him 51 days of Sick Leave accrued.
7. The correct answer is C. Ann could qualify for the Food Stamps and Energy Assistance Programs based on her income, personal assets, age, and status as a renter in a 1 person household.
8. The correct answer is C. Esther could qualify for the Medical Care, Energy Assistance, Weatherization, Senior Employment Assistance, and Pharmaceutical Assistance Programs based on her 2-person household income, personal assets, age, and status as a homeowner.
9. The correct answer is B. Wes could qualify for the Energy Assistance and Pharmaceutical Assistance Programs based on his disability, income, personal assets, and status as a renter.
10. The correct answer is D. Edward could qualify for the Energy Assistance, Weatherization, and Pharmaceutical Assistance Programs based on his age, income, personal assets, and status as a homeowner.
11. The correct answer is A. Graph III indicates that 150 employees from Health participated in 1998 and more than 350 participated in 1999, which is more than double that in 1998.
12. The correct answer is C. Graph IV indicates that 525 employees volunteered at the library while 200 cleaned parks. To solve:
- Subtract the number who cleaned parks from the number who volunteered at the library (525-200) to determine that 325 more employees volunteered at the library than cleaned parks.

13. The correct answer is A. Graph III indicates that 550 employees from Health, 500 from Public Safety, 275 from Municipal Works, 225 from Administration, and 75 from Human Resources participated in Community Service Week in 2002. Graph IV indicates that 325 employees planted trees. To solve:
- Add the number of employees participating in Community Service Week from each department ($550 + 500 + 275 + 225 + 75$) to determine that a total of 1625 employees participated in 2002.
 - Divide the number of employees who planted trees by the total number of employees who participated in Community Service Week in 2002 ($325 / 1625$).
 - Multiply this number by 100 to determine that 20% participated.
14. The correct answer is C. Graph III indicates that 500 employees from Public Safety participated in Community Service Week in 2002. Graph IV indicates that 325 employees painted in 2002. To solve:
- Subtract the number of employees who painted from the total number who volunteered from Public Safety ($500 - 325$) to determine that 175 remaining employees from Public Safety participated in other events.
15. The correct answer is D. Graph I indicates that there were 2000 employees in Doheny County in 2002. Graph II indicates that 36% of Doheny County employees in 2002 were from Health, 32% from Public Safety, 16% from Municipal Works, 12% from Administration, and 4% from Human Resources. Graph III indicates that 550 employees from Health, 500 from Public Safety, 275 from Municipal Works, 225 from Administration, and 75 from Human Resources participated in Community Service Week in 2002. To solve:
- Determine the total number of employees in each department by multiplying the decimal equivalent of the corresponding percentage (Graph II) by the total number of employees (Graph I).

Number of employees in Human Resources	=	$.04 \times 2000$	=	80
Number of employees in Administration	=	$.12 \times 2000$	=	240
Number of employees in Municipal Works	=	$.16 \times 2000$	=	320
Number of employees in Public Safety	=	$.32 \times 2000$	=	640
Number of employees in Health	=	$.36 \times 2000$	=	720

- Divide the number who participated in Community Service Week from each department (Graph III) by the number in the department and multiply this number by 100 to determine the percent of participation.

% participating from Human Resources	=	$(75 / 80) \times 100$	=	93.8%
% participating from Administration	=	$(225 / 240) \times 100$	=	93.8%
% participating from Municipal Works	=	$(275 / 320) \times 100$	=	85.9%
% participating from Public Safety	=	$(500 / 640) \times 100$	=	78.1%
% participating from Health	=	$(550 / 720) \times 100$	=	76.4%

- Of the choices provided, identify Human Resources as the department with the highest percentage of employees participating in Community Service Week with a 93.8% participation rate.