

1. The sum of all proportions in a frequency distribution should sum to

- a. 0.
- *b. 1.
- c. 100.
- d. N.

General Feedback:

28

2. Frequency distributions for _____ variables are often difficult to read.

- a. nominal
- b. ordinal
- *c. interval-ratio
- d. dichotomous

General Feedback:

38

3. When constructing a rate, the denominator refers to the

- a. number of events or occurrences.
- *b. number of persons at risk of experiencing an event or occurrence.
- c. ratio of events or occurrences to the number of persons at risk of experiencing the event or occurrence.
- d. product of the events or occurrences and the number of persons at risk of experiencing the event or occurrence.

General Feedback:

47

4. In a sample of 250 respondents, females account for three-fifths of all observations in the sample. What is the total number of males in the sample?

- *a. 100
- b. 150
- c. 2/5
- d. 3/5

General Feedback:

29

5. A table showing the frequency at or below each category for a variable of interest is referred to as a

- a. frequency distribution.
- b. difference distribution.
- *c. cumulative frequency distribution.
- d. cumulative difference distribution.

General Feedback:

43

6. Which of the following is not a proportion?

- a. 0.0
- b. 0.5
- c. 1.0
- *d. 1.5

General Feedback:

29

7. In a sample of 100 people, 57 completed only high school, 23 went on to complete only some college, 13 went on to complete a two-year or four-year college, and 7 went on to graduate school. What proportion of the sample does not have a two-year or four-year college degree?

- a. 0.07
- b. 0.13
- *c. 0.80
- d. 0.87

General Feedback:

29

8. What is the formula for a proportion?

- *a. $p = f / N$
- b. $p = n / f$
- c. $p = (f / n) * 100$
- d. $p = (f / 100) * n$

General Feedback:

29

9. A relative frequency obtained by dividing the frequency in each category by the total number of cases and multiplying by 100 is a

- a. count
- b. frequency
- c. proportion
- *d. percentage

General Feedback:

31

10. A rate based on the total population is referred to as a(n) _____ rate.

- a. actual
- b. determinant
- c. whole
- *d. crude

General Feedback:

47

11. A rate is usually expressed as a

- a. count.
- b. frequency.
- c. multiple of the sample size.
- *d. multiple of some power of 10.

General Feedback:

47

12. Which of the following is not a rate?

- a. The number of female births per 1,000 women ages 25-29
- b. The number of deaths to infants between the ages of 0 and 1 per 100,000 population
- *c. The number of violent crimes committed in urban U.S. cities in between 2005 and 2007
- d. The number of second marriages per 100,000 adults of marriageable age

General Feedback:

47

13. About 13 percent of survey respondents in a sample reported that they do not attend religious services regularly. About what proportion of respondents did not attend religious services regularly?

- a. 13
- *b. .13
- c. 87
- d. .87

General Feedback:

42

14. The sum of all frequencies in a frequency distribution should sum to

- a. 0.
- b. 1.
- c. 100.
- *d. N.

General Feedback:

35

15. Which of the following variables is best suited for organization and description using a frequency distribution?

- a. The monthly totals for the number of immigrants to the U.S. for the period 1958-2013.
- b. Number of votes for Barack Obama in the 2012 presidential election by U.S. county.
- *c. Whether or not a person received a telemarketing call during the month of September, 2013.
- d. The proportion of households living in poverty for a sample of 198 U.S. neighborhoods.

General Feedback:

37

16. In a sample of 500 respondents, men account for 20% of all observations in the sample. What is the total number of females in the sample?

- a. 100
- b. 200
- c. 300
- *d. 400

General Feedback:

42

17. A proportion is a

- a. relative frequency obtained by dividing the total number of cases by the frequency in each category.
- *b. relative frequency obtained by dividing the frequency in each category by the total number of cases.
- c. number representing the total number of cases in a population.
- d. distribution showing the frequency at or below each category of the variable.

General Feedback:

29

18. A cumulative percentage distribution shows the

- a. percentage at or above each category of the variable.
- b. total number of cases in a population.
- *c. percentage at or below each category of the variable.
- d. total frequency of all variables.

General Feedback:

43

19. Inspecting the title and checking the sources are basic principles of

- a. studying for an exam.
- *b. reading a statistical table.
- c. determining research question.
- d. calculating a rate.

General Feedback:

49

20. What is the formula for a percentage?

- a. $p=f/n$
- b. $p=n/f$
- *c. $p=(f/n)100$
- d. $p=(n/f)100$

General Feedback:

31

21. Fill in the empty cells in the following table

| Education level | <i>f</i> | <i>p</i> | % |
|---------------------------|----------|----------|---|
| Completed High School | 187 | | |
| Completed College | 119 | | |
| Completed Graduate School | 62 | | |

Correct Answer:

| Education level | <i>f</i> | <i>p</i> | % |
|---------------------------|----------|----------|------|
| Completed High School | 187 | .508 | 50.8 |
| Completed College | 119 | .323 | 32.3 |
| Completed Graduate School | 62 | .168 | 16.8 |

22.

| Income level | <i>f</i> | <i>p</i> | <i>%</i> |
|-----------------|----------|----------|----------|
| <34,999 | | | |
| 35,000 – 99,999 | | .20 | |
| >100,000 | 7 | .10 | |

Correct Answer:

| Income level | <i>f</i> | <i>p</i> | <i>%</i> |
|-----------------|----------|----------|----------|
| <34,999 | 49 | .70 | 70 |
| 35,000 – 99,999 | 14 | .20 | 20 |
| >100,000 | 7 | .10 | 10 |

23. Fill in the empty cells in the following table

| Language Proficiency | <i>f</i> | <i>cf</i> | <i>p</i> | <i>%</i> |
|----------------------|----------|-----------|----------|----------|
| 1 Language | 129 | | | 50.0 |
| 2 Languages | | 214 | | |
| 3+ Languages | | | | |

Correct Answer:

| Language Proficiency | <i>f</i> | <i>cf</i> | <i>p</i> | <i>%</i> |
|----------------------|----------|-----------|----------|----------|
| 1 Language | 129 | 129 | .500 | 50.0 |
| 2 Languages | 85 | 214 | .329 | 32.9 |
| 3+ Languages | 44 | 258 | .171 | 17.1 |

24. Fill in the empty cells in the following table

| Social Capital | <i>f</i> | <i>cf</i> | <i>p</i> | <i>%</i> |
|----------------|----------|-----------|----------|----------|
| Low | | 188 | | |
| Medium | | 234 | | |
| Hi | | 298 | | |

Correct Answer:

| Social Capital | <i>f</i> | <i>cf</i> | <i>p</i> | <i>%</i> |
|----------------|----------|-----------|----------|----------|
| Low | 188 | 188 | .631 | 63.1 |
| Medium | 66 | 254 | .221 | 22.1 |
| Hi | 44 | 298 | .148 | 14.8 |

25. Fill in the empty cells in the following table

| Number of Marriages | <i>f</i> | <i>cf</i> | <i>p</i> | % |
|---------------------|----------|-----------|----------|------|
| 0 | | 165 | | |
| 1 | 60 | | | |
| 2+ | | 250 | | 10.0 |

Correct Answer:

| Number of Marriages | <i>f</i> | <i>cf</i> | <i>p</i> | % |
|---------------------|----------|-----------|----------|------|
| 0 | 165 | 165 | .660 | 66.0 |
| 1 | 60 | 225 | .240 | 24.0 |
| 2+ | 25 | 250 | .100 | 10.0 |

26. Consider the table below obtained from the U.S. Bureau of the Census, Statistical Abstract of the United States, 2003. If the total number of military reserve personnel is 129,047, how many Blacks and Latinos are in the military reserve?

| Military Reserve Personnel by Race, 2002 | |
|--|-------|
| White | 73.2% |
| Black | 15.9% |
| Latino | 7.9% |
| Asian | 2.3% |
| Native American | 0.7% |

Correct Answer:

30,713

27. Using the following information from the U.S. Census Bureau, calculate both the number and percentage of non-white military reserve personnel.

| Military Reserve Personnel by Race, 2002 | |
|--|-------|
| White | 73.2% |
| Black | 15.9% |
| Latino | 7.9% |
| Asian | 2.3% |
| Native American | 0.7% |

The total number of military reserve personnel is 129,047.

Correct Answer:

34,585; 26.8%

28. Using the following information from the U.S. Census Bureau, calculate both the number and percentage of non-Asian military reserve personnel.

| Military Reserve Personnel by Race, 2002 | |
|--|-------|
| White | 73.2% |
| Black | 15.9% |
| Latino | 7.9% |
| Asian | 2.3% |
| Native American | 0.7% |

The total number of military reserve personnel is 129,047.

Correct Answer:
126,079; 97.7%

29. Construct a cumulative frequency distribution using the following information. Begin with whites and work through the table in the order of the racial categories listed.

| Military Reserve Personnel by Race, 2002 | |
|--|-------|
| White | 73.2% |
| Black | 15.9% |
| Latino | 7.9% |
| Asian | 2.3% |
| Native American | 0.7% |

The total number of military reserve personnel is 129,047.

Correct Answer:

| Military Reserve Personnel by Race, 2002 | |
|--|---------|
| White | 94,462 |
| Black | 114,981 |
| Latino | 125,176 |
| Asian | 128,144 |
| Native American | 129,047 |

30. Using the following information from the U.S. Census Bureau, how many military reserve personnel are White, Black, or Latino?

| Military Reserve Personnel by Race, 2002 | |
|--|-------|
| White | 73.2% |
| Black | 15.9% |

| | |
|-----------------|------|
| Latino | 7.9% |
| Asian | 2.3% |
| Native American | 0.7% |

The total number of military reserve personnel is 129,047.

Correct Answer:

125,716

31.

Fill in the empty cells in the following table.

| Homosexuals Should Have the Right to Marry, 2006 | | |
|--|----------|--------------|
| | <i>f</i> | <i>cum %</i> |
| Strongly Agree | 307 | 15.5 |
| Agree | 391 | |
| Neither Agree Nor Disagree | 260 | 48.3 |
| Disagree | | |
| Strongly Disagree | 695 | |

Correct Answer:

| Homosexuals Should Have the Right to Marry, 2006 | | |
|--|----------|--------------|
| | <i>f</i> | <i>cum %</i> |
| Strongly Agree | 307 | 15.5 |
| Agree | 391 | 35.2 |
| Neither Agree Nor Disagree | 260 | 48.3 |
| Disagree | 329 | 64.9 |
| Strongly Disagree | 695 | 100.0 |

32. According to Table 1, what proportion of respondents neither agree nor disagree?

Table 1

| Homosexuals Should Have the Right to Marry, 2006 | | |
|--|----------|--------------|
| | <i>f</i> | <i>cum %</i> |
| Strongly Agree | 307 | 15.5 |
| Agree | 391 | 35.2 |
| Neither Agree Nor Disagree | 260 | 48.3 |
| Disagree | 329 | 64.9 |
| Strongly Disagree | 695 | 100.0 |

Correct Answer:
 .131

33. According to Table 1, what percentage of respondents strongly agree or strongly disagree?

Table 1

| Homosexuals Should Have the Right to Marry, 2006 | | |
|--|----------|--------------|
| | <i>f</i> | <i>cum %</i> |
| Strongly Agree | 307 | 15.5 |
| Agree | 391 | 35.2 |
| Neither Agree Nor Disagree | 260 | 48.3 |
| Disagree | 329 | 64.9 |
| Strongly Disagree | 695 | 100.0 |

Correct Answer:
 50.6%

34. Table 1
 Refer to Table 1 and construct a cumulative frequency distribution. Start with those who strongly disagree and work your way down through the remaining categories.

Table 1

| Homosexuals Should Have the Right to Marry, 2006 | | |
|--|----------|--------------|
| | <i>f</i> | <i>cum %</i> |
| Strongly Agree | 307 | 15.5 |
| Agree | 391 | 35.2 |
| Neither Agree Nor Disagree | 260 | 48.3 |
| Disagree | 329 | 64.9 |
| Strongly Disagree | 695 | 100.0 |

Correct Answer:

| Homosexuals Should Have the Right to Marry, 2006 | |
|--|-----------|
| | <i>cf</i> |
| Strongly Agree | 307 |
| Agree | 698 |
| Neither Agree Nor Disagree | 958 |

| | |
|-------------------|------|
| Disagree | 1287 |
| Strongly Disagree | 1982 |

35. According to Table 1, how many people do not disagree in some capacity or another?

| | |
|--|-----------|
| Homosexuals Should Have the Right to Marry, 2006 | |
| | <i>cf</i> |
| Strongly Agree | 307 |
| Agree | 698 |
| Neither Agree Nor Disagree | 958 |
| Disagree | 1287 |
| Strongly Disagree | 1982 |

Correct Answer:
958

36. Explain how cumulative frequency distributions are obtained. What do they allow us to do?

Correct Answer:
They are obtained by adding to the frequency in each category the frequencies of all the categories below it. They allow us to locate the relative position of a given score in a distribution.