**APPENDIX: Test Questions**
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Thirty-four example questions, of 54 total, for Parts One and Two of the experiment are listed in this Appendix. Question designations list map series and question number (e.g. S3Q5 designates Map Series 3 and Question 5). Some questions are followed by a note specifying the number of other similar questions used in the experiment but not listed in this Appendix. Questions are grouped by Task type.

This Appendix is supporting material for the experiment described in:
See [http://www.geovista.psu.edu/grants/dg-qg/classing_epi.html](http://www.geovista.psu.edu/grants/dg-qg/classing_epi.html)

**TASK 1: HSA (13 questions)**

S3Q1. For the marked area (Buffalo, NY), a possible rate for heart disease could be:

a) 151.7  
b) 117.1  
c) 105.3

(3 similar questions)

S5Q2. Compare areas marked “X” (Seattle, WA) and “Y” (Casper, WY) on the map below. On the map for breast cancer, the rate for area X ________ the rate for area Y.

a) higher than  
b) similar to  
c) less than

(2 similar questions)

S9Q2. Complete the sentence. During the period 1985-87, the same marked area (Gregory/Tripp, SD) was:

a) part of a cluster of high values.  
b) part of a cluster of low values.  
c) not part of a well defined cluster.

S2Q1. Given that the HIV rate for white males for the marked area (Atlanta, GA) is 35.8, select the best answer:

a) The marked area is part of a cluster of high rates.  
b) The marked area is part of a cluster of low rates.  
c) The marked area has a relatively high rate, but is not part of a well defined cluster.  
d) The marked area has a relatively low rate, but is not part of a well defined cluster.

S6Q2. Fill in the blank. On the 1982-84 map, the marked area (Georgetown, SC) has a rate that is ________ the national average.

a) higher than  
b) approximately equal to  
c) less than

(3 similar questions)
**TASK 2: Region** (12 questions)

S2Q2. The average unintentional injuries rate for white males in Region J is closest to:
   a) 20
   b) 40
   c) 70

(2 similar questions)

S7Q4. Which region had the lowest average rate for lung cancer in 1979-81?
   a) Region A
   b) Region C
   c) Region D

(1 similar question)

S7Q3. Fill in the blank. Rates for stroke in 1979-81 in Region B were ______ stroke rates in Region D.
   a) generally higher than
   b) approximately equal to
   c) generally lower than

S2Q5. Fill in the blank. Rates for unintentional injuries for white males in Regions B and C are ______ rates on the rest of the map.
   a) generally higher than
   b) approximately equal to
   c) generally lower than

S5Q3. Fill in the blank. Breast cancer rates in the southern half of Region A are ______ rates in the northern half of the same region.
   a) generally higher than
   b) approximately equal to
   c) generally lower than

S1Q4. Which region on the map of lung cancer for white males is dominated by low rates?
   a) Region D
   b) Region G
   c) Region J

S2Q3. Fill in the blank. In Region J, HIV rates for white males in urban areas are ______ rates in rural areas in the same region.
   a) generally higher than
   b) approximately equal to
   c) generally lower than

S1Q3. Which location contains the most obvious cluster of high rates for lung cancer in white males?
   a) Northern half of Region H
   b) Southern half of Region H
   c) Eastern half of Region E
S3Q3. Examine the map for stroke and complete the sentence. Excluding Florida, Regions F, H, and L could best be described as:
   a) one large cluster of high rates
   b) several clusters of high rates
   c) one large cluster of low rates
   d) several clusters of low rates
   e) having no obvious pattern of clustering

TASK 3: Map (3 questions)

S4Q5. Based on the overall pattern on the map, homicide rates are highest in what part of the country?
   a) East
   b) West
   c) North
   d) South

S5Q5. Which statement best describes the map pattern for breast cancer?
   a) Clusters of high values in the North with some individual high values in the South.
   b) Clusters of high values in the East with some individual high values in the West.

S6Q5. Complete the sentence. The data pattern on the 1991-93 map could best be described as:
   a) highly clustered
   b) slightly clustered
   c) not clustered

TASK 4: HSA Comparison (4 questions)

S4Q2. Fill in the blank. For the marked area (Houston, TX) the mortality rate for motor vehicle injuries is ________ the rate for homicide.
   a) higher than
   b) similar to
   c) lower than

(2 similar questions)

S6Q1. Fill in the blank. For the marked area (Cheboygan, MI) the heart disease rate for white males for 1991-93 is ________ the rate for 1985-87.
   a) much higher than
   b) slightly higher than
   c) slightly lower than
   d) much lower than

TASK 5: Region Comparison (11 questions)

S2Q4. Given that the highest HIV rate for white males in Florida is 48.8, fill in the blank. In the state of Florida, the average HIV rate for white males is ________ the average rate for unintentional injuries for white males.
   a) higher than
   b) approximately equal to
   c) lower than

(1 similar question)
S3Q4. Fill in the blank. Within Regions H and L, the average rate for stroke is ________ the average rate for all cancers.
   a) much higher than
   b) slightly higher than
   c) slightly lower than
   d) much lower than

S6Q3. Complete the sentence. For Region F, between 1982-84 and 1991-93, the average rate:
   a) increased.
   b) remained about the same.
   c) decreased.

(3 similar questions)

S5Q4. Fill in the blank. Within Region G, areas with higher median incomes have ________ breast cancer rates.
   a) higher
   b) lower

(1 similar question)

S6Q4. Examine Regions J, K, and H on the four maps and complete the sentence. Over time, rates have:
   a) decreased in Region J and increased in Region H, suggesting a shift in location of higher rates.
   b) remained at similar levels in these regions
   c) remained high in Region J and increased in Region H, suggesting a spread in location of higher rates.

S1Q5. Based on the maps for white males and white females, which of the following is a TRUE statement?
   a) Region A is the region with the highest average rate for both males and females.
   b) Region H is the region with the highest average rate for both males and females
   c) Region A has the highest average rate for males, and Region H has the highest average rate for females.
   d) Region A has the highest average rate for females, and Region H has the highest average rate for males.

TASK 6: Map Comparison (11 questions)

S8Q6. Which map has the lowest average rate?
   a) Liver disease, White male
   b) Liver disease, White female
   c) COPD, White male
   d) COPD, White female

(1 similar question)

S7Q6. Complete the sentence. Between 1979-81 and 1991-93, lung cancer rates in Region E:
   a) generally increased.
   b) remained about the same.
   c) generally decreased.

(2 similar questions)

S9Q6. Which time span saw the largest decrease in the overall stroke rate for the entire country?
   a) 1982-84 to 1985-87
   b) 1985-87 to 1988-90
   c) 1988-90 to 1991-93
S1Q6. Based on all four maps, fill in the blank. Rates for white persons are ________ rates for black persons.
   a) generally higher than
   b) approximately equal to
   c) generally lower than

S2Q6. Which map has the largest range between maximum and minimum rates?
   a) HIV, White males
   b) HIV, Black males
   c) Unintentional injuries, White males
   d) Unintentional injuries, Black males

S5Q6. Fill in the blank. Throughout the entire country, urban areas ________ compared to rural areas.
   a) have higher breast cancer rates
   b) have lower breast cancer rates
   c) in some regions have higher breast cancer rates, and in some regions have lower rates

S3Q6. Which map pattern is most different from the pattern on the map of all causes?
   a) Heart disease
   b) All cancers
   c) Stroke

S4Q6. Compare the patterns on the three mortality maps and select the best answer.
   a) Motor vehicle injuries -- highly clustered
      Suicide -- not clustered
      Homicide -- not clustered
   b) Motor vehicle injuries -- not clustered
      Suicide -- not clustered
      Homicide -- highly clustered
   c) Motor vehicle injuries -- not clustered
      Suicide -- highly clustered
      Homicide -- highly clustered