

Sample Test Material for:

Understanding and interpreting tabular material

Test material will be presented in a multiple-choice question format.

There are 15 questions in this subject area.

Test Task: These questions test your ability to understand, analyze, and use the internal logic of data presented in tabular form. You may be asked to perform tasks such as completing tables, drawing conclusions from them, analyzing data trends or interrelationships, and revising or combining data sets. The concepts of rate, ratio, and proportion are tested. Mathematical operations are simple, and computational speed is not a major factor in the test.

NOTE: You should bring with you a hand-held battery-or-solar-powered calculator for use on this test. You will NOT be permitted to use the calculator function of your cell phone.

SAMPLE TABLE:

Directions: Base your answers to the following three questions on the information in the table below.

**Population of a City by Age and Gender
(In Thousands)**

Age	Female	Male	Total
Under 25	70	72	142
25-34	?	27	?
35-44	?	28	53
45-54	27	28	55
55-64	30	?	57
65 and over	85	75	160
Total	261	257	518

Note: Spaces with question marks can be filled in using information given in the table and in the questions.

SAMPLE QUESTION 1:

How many people in the city were between 25 and 34 years old?

- A. 51
- B. 27,000
- C. 51,000
- D. cannot be determined from the information provided

Solution:

To answer this question correctly, you must first note that the numbers in the table represent thousands of people (see the table heading). You are asked to find the total number of people aged 25-34. Since this information is missing from the table, it is necessary to calculate it by using other information which is in the table. You must add the number of people in all the age groups other than 25-34, and then subtract this sum from the total population of the city. This will then give the number of people aged 25-34.

142,000	under 25	
+53,000	35-44	518,000 total population (all ages)
+55,000	45-54	- 467,000 total population (all ages except 25-34)
+57,000	55-64	51,000 population aged 25-34
+160,000	65 and over	
<u>467,000</u>		

There are 51,000 people in the city between the ages of 25 and 34 (choice C).

SAMPLE QUESTION 2:

Most nearly, what percent of the total population of the city was female aged 35 to 54?

- A. 5%
- B. 10%
- C. 14%
- D. 20%

Solution:

To answer this question correctly you must find the number of females aged 35 to 54. This requires you to add the number of females aged 35-44 to the number aged 45-54. You must first find the number of females who are aged 35 to 44. This information is missing from the table, but you can calculate it by subtracting the number of males who are aged 35 to 44 from the total number of people in that age group.

$(53,000 - 28,000 = 25,000$; there are 25,000 females aged 35-44).

You then need to add the number of females aged 35-44 to the number of females aged 45-54;
 $(25,000 + 27,000 = 52,000$; there are 52,000 females between the ages of 35 and 54).

You must then divide this number by the total population of the city, and convert the answer to a percent.
 $(52,000/518,000 = .100386$; **this is nearest to 10%**).

Therefore, the percentage of the total population of the city which was female aged 35 to 54 is 10% (choice B).

SAMPLE QUESTION 3:

If 40% of the total male population of the city earns wages, and 30% of the total female population of the city earns wages, which one of the following statements comparing the number of males earning wages to the number of females earning wages is true?

- A. There are 24,500 more males than females earning wages.
- B. There are 27,300 more males than females earning wages.
- C. There are 51,800 more males than females earning wages.
- D. There are 27,300 fewer males than females earning wages.

Solution:

To answer this question correctly you must use some information given in the question and some information given in the table. It is important to be careful and apply the correct percentage for each gender. (The percentage for males is given first in the question, but the number of males is second in the table).

To calculate the number of males earning wages, multiply the total number of males by 40%.
 $(257,000 \times .40 = 102,800)$

To calculate the number of females earning wages, multiply the total number of females by 30%.
 $(261,000 \times .30 = 78,300)$

To compare the two numbers, subtract the number of female wage earners from the number of male wage earners.
 $(102,800 - 78,300 = 24,500)$

There are 24,500 more male wage earners than female wage earners (choice A).