
June, 2000

BELLSOUTH

**NETWORK SERVICES
ADMINISTRATION
TEST**

STUDY GUIDE

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NETWORK SERVICES ADMINISTRATION TEST

The Network Services Administration Test (NSA) is a 90 minute test, exclusive of directions, which assesses a candidate's ability to perform basic functions such as map reading, basic arithmetic, and determination of proportion in shape and scale of work.

The Network Services Administration Test consists of the following three test sections. A passing score must be obtained in each test section in order to meet the overall qualification standards for the test.

Section 1: Map Reading

This section is 25 minutes in length and consists of 18 multiple choice questions in the following skill areas:

- Finding a location on a map
- Determining compass directions on a map (North, South, etc.)
- Using a map scale to estimate distance
- Interpreting symbols and legends on a map
- Following directions

A sample problem, similar to those found in Section 1, is presented below.

—————▶ N

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

North arrow as indicated.

Example #1 Starting in the Southwest corner, proceed North 1 block, East 2 blocks, and South 1 block. Which block are you on now?

- A) 15
- B) 14
- C) 9
- D) 10

The correct answer is C. To solve this problem, first get your bearings by figuring out which way is North. Notice that North is pointing towards the right side of the page. Then, identify which block is in the Southwest corner. In this case, that would be block 1. Starting from block 1, proceeding North 1 block puts you in block 2. From there, proceeding East 2 blocks puts you in block 10. Finally, proceeding South 1 block puts you in block 9.

Section 2: Job Layout

This section is 30 minutes in length and consists of 14 multiple choice questions in the following skill areas:

- Positioning items proportionately on a page
- Using proportion in shapes and scales
- Interpreting and following rough sketches and notes
- Understanding symbols on a job layout
- Transcribing information

In addition, attention to detail is very important in this section.

A sample problem, similar to those found in Section 2, is presented below.

Example #2 Given that:

Streets are dashed lines.

Stop signs are circles.

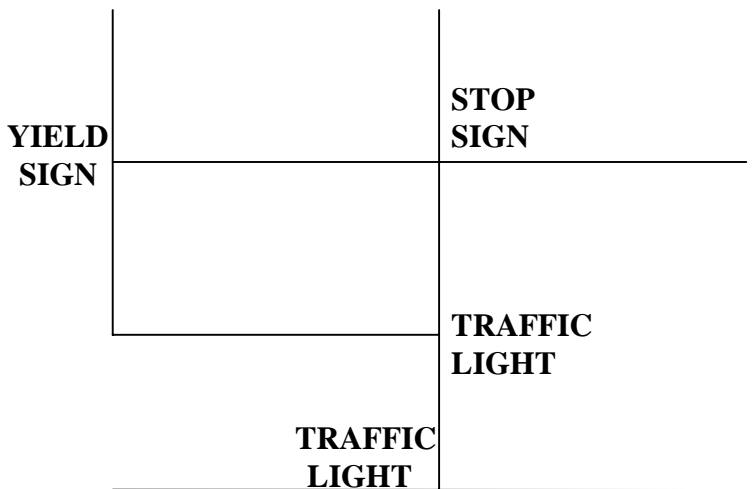
Yield signs are squares.

Traffic lights are triangles.

Which drawing with symbols on Job Layout 2B best represents the sketch with words in Job Layout 2A?

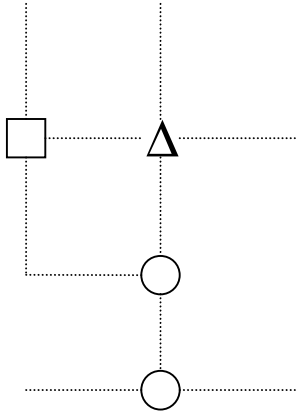
- A) A
- B) B
- C) C
- D) D

Job Layout 2A

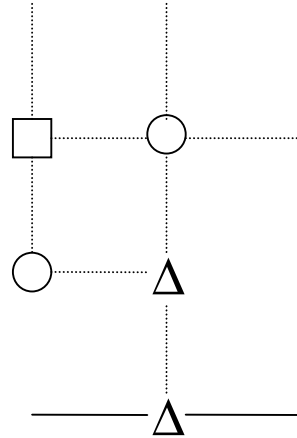


Job Layout 2B

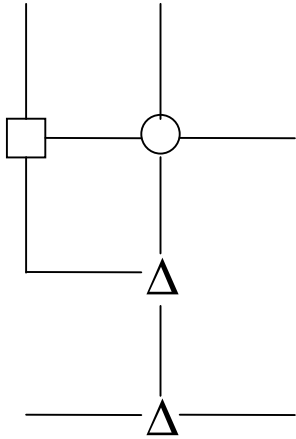
A.



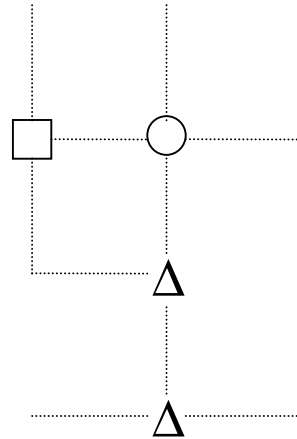
B.



C.

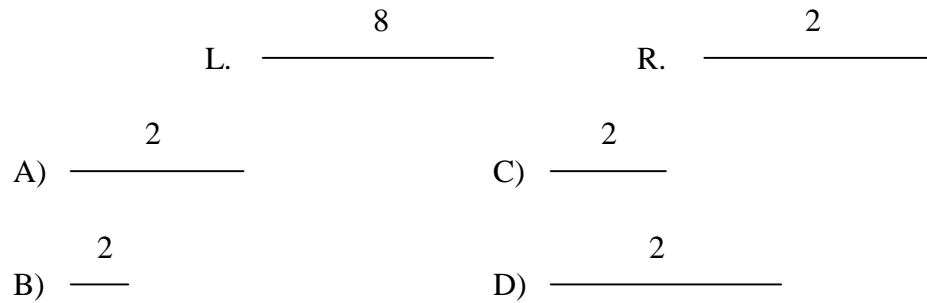


D.



The correct answer is D. You can rule out A because stop signs are represented by circles, not triangles. You can rule out B because there is no stop sign located below the yield sign on job layout 2A. Also, at the bottom of the diagram, the street is not represented by a dashed line. Option C can also be ruled out because streets should be represented by dashed lines, not solid lines.

Example #3 Two lines are shown, L and R. R is not drawn to scale. What should R look like if it were drawn to scale?



The correct answer is B. The length of R is 2 and the length of L is 8. In other words, R is exactly one fourth the length of line L. The only line that meets this requirement is the line in answer B.

Section 3: Math for Outside Plant

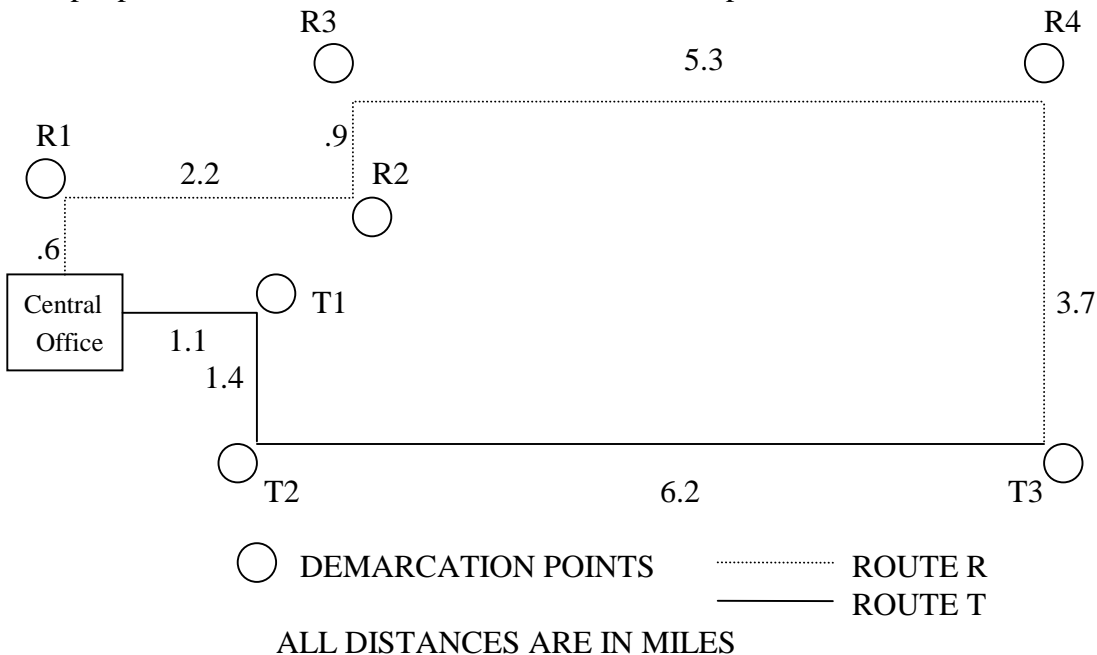
This section is 35 minutes in length and consists of 16 multiple choice questions in the following skill areas:

- Performing arithmetic in applied problems
- Converting data in applied problems
- Using tables in applied problems

If you are uncertain of a response, please select the most plausible response and move on. Your score on the test will be the total number of correct responses. There is no penalty for guessing.

You are allowed to use a calculator while solving problems in this section.

A sample problem, similar to those found in Section 3, is presented below.



Example #4 How far is it from the Central Office to point T3 via route R?

- A) 8.6 miles
- B) 12.7 miles
- C) 12.1 miles
- D) 10.8 miles

The correct answer is B. Although going from the Central Office to T3 is shorter via route T, the questions asks you to follow route R. Adding up the mileage along route R, you get $.6 + 2.2 + .9 + 5.3 + 3.7$, which equals 12.7 miles.

Example #5 If a new demarcation point, T4, was built exactly half way between T2 and T3, how much shorter would the distance be from the Central Office to T4 (via route T) than from the Central Office to R4 (via route R)?

- A) 5.6 miles
- B) 4.5 miles
- C) 3.4 miles
- D) 14.6 miles

The correct answer is C. To solve this problem, first figure out the distance half way between T2 and T3. This is 3.1 miles. Next figure out how far it would be from the Central Office to T4 via route T. Adding the amounts along route T gives you $1.1 + 1.4 + 3.1$, which equals 5.6 miles. Then calculate the distance from the Central Office to R4 via route R, which is $.6 + 2.2 + .9 + 5.3$, or 9 miles. Subtracting 5.6 miles from 9 miles yields 3.4 miles.

Additional Preparation Recommendations

In addition to reviewing the material in this study guide, the following suggestions are offered to further your studying.

Section 1: Become as familiar as you can with how to read a map. Practice looking at maps and calculating distances between points on the map using the map scale. Be able to relate points on a map using compass directions (e.g., “Point A is Northeast of Point B”).

Section 2: Be able to take a sketch not drawn to scale and determine what that sketch would look like if it were drawn to scale. Compare two seemingly identical drawings and determine what is different about them.

Section 3: Practice math word problems. Be able to look at a sketch, determine distance between points, and perform basic arithmetic functions.

Remember:

- Review all of the answers to a question BEFORE deciding which answer is best.
- Each section of the test is timed, so use your watch or the clock in the room to keep track of your time during the test so that you pace yourself appropriately.

Retesting

If you do not qualify on the Network Services Administration Test, you are eligible to be retested, at your request, in six months, if this is the first time you have taken this test, or in one year if you have taken the test before. Qualified test scores are valid for five years, provided job requirements and test standards do not change.