Aptitude Test

Well aptitude test battery consists of two tests. It will take approximately 2 1/2 hours to complete. The number of items and the amount of time allotted for each test are:

1. Algebra and Functions – 46 minutes to complete 33 questions.
2. Reading Comprehension – 51 minutes to complete 51 questions.

You will take a short break between the Algebra and Functions Test and the Reading Comprehension Test.

Previous knowledge of electrical work is not required.

Approximately a day or two after you take the test battery, your local JATC will e-mail you the results. They will subsequently notify you concerning the disposition of your application. A full three (3) months must elapse before you may retake the test. The three (3) month rule remains in effect after each subsequent retake of the test. Please Note: *Willful attempts to violate this rule may result in permanent disqualification!*

If you obtain a qualifying score of four (4) or higher on the test battery, you will be scheduled for an oral interview. You will be interviewed by a committee representing both the NECA and the IBEW. Based on the interview and review of your qualifications, you will receive an overall ranking. Your name will be placed on an eligibility list for two years.

Come to the test better prepared. Visit ElectricPrep.com for more information about a Mathematics Refresher course, Reading Comprehension Course, or an Interview Course.

Sample Algebra and Functions & Reading Comprehension

The Algebra and Function section is a test of your ability to solve problems using algebra and associated mathematical functions. Here are 5 sample questions with the answer key.

Answer:

1. B
2. A
3. C
4. A
5. C

6. C

7. D

8. C

Questions on the next page.

1. Consider the following formula: A = B + 3(4 – C)

If B = 5 and C = 2 what is the value of A?

1. 7 B.11 C. 12 D. 17
2. Consider the following formula: y equals 3(x + 5) (x – 2)

Which of the following formulas is equivalent to this one?

1. $y=3x^{2}+9x-30$
2. $y=x^{2}+3x-10$
3. $y=3x^{2}+3x-10$
4. $y=3x^{2}+3x-30$
5. Consider the following pattern of numbers:

110, 112, 107, 109, 104, What is the next number in the pattern?

1. 97 B. 99 C. 106 D. 109
2. Consider the following formula: $a=\frac{1}{2}b-4$

Which of the following statements is true for this formula?

1. When the value of (b) is less than 8, (a) is negative.
2. When the value of (b) is greater than 8, (a) is negative.
3. When the value of (b) is less than 8, (a) is positive.
4. When the value of (b) is greater than 4, (a) is positive.

|  |  |
| --- | --- |
| X | Y |
| 0 | -5 |
| 1 | -4 |
| 2 | -3 |
| 3 | -2 |
| 4 | -1 |
| 5 | 0 |
| 6 | 1 |
| 7 | 2 |

5) Consider the following table:

 Which of the following choices represents the

same relationship as demonstrated in the table?

|  |  |
| --- | --- |
| X | Y |
| 10 | -40 |
| 20 | -30 |
| 30 | -20 |
| 40 | -10 |

1.

B. $ Y=\frac{X}{2}-5$

C. Y is equivalent to the difference between the value of X and a constant C, where C = 5.

D. Y is equivalent to the product of the value of X and a constant C, where C = 5.

The reading comprehension test measures your ability to obtain information from written passages. You will be presented with a passage followed by several questions about it. A sample passage is shown below, followed by three sample questions. This passage is shorter than those on the actual test.

The Passage:

The timing of New Year's Day has changed with customs and calendars. The Mayan Civilization, on what is now called the Yucatan peninsula of Mexico, celebrated the New Year on one of the two days when the noonday sun is directly overhead. In the equatorial regions of the earth, between the Tropics of Cancer and Capricorn, the sun is in this position twice a year, once on its passage southward, and once on its passage northward. At the early Mayan city of Izapa in the southern Yucatan, the overhead date for the sun on its southward passage was August 13. The Mayans celebrated this as the date for the beginning of the New Year. Later at the more northerly Mayan site Edzna, the corresponding overhead date is July 26. Analyses of Mayan pictorial calendars indicate that they celebrated the new year on August 13 prior to 150AD, and on July 26 after that year. This change has been explained by archaeological dating showing that 150 AD was the time that the Mayans moved the hub of their civilization from the southern to the northern site.

6) According to the passage, the sun of Edzna was directly overhead at noon on:

 A. July 26 only

 B. August 13 only

 C. July 26 and one other date

 D. August 13 and one other date

7) If the Mayan’s had moved their civilization’s center South of Izapa, their new date for celebration of the New Year would probably have been closest to which of the following dates?

 A. January 1

 B. February 20

 C. March 25

 D. September 15

8) Based on the information in the passage, which of the following statements is true?

 A. Mayans made Edzna the capital because it was more temperate than Izapa.

 B. All Mayans moved to Edzna in 150 AD.

 C. Mayans used calendars to mark the passage of time.

 D. The Mayan city of Izapa was destroyed in 250 AD.