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# **Application and Aptitude Test**

To become eligible for apprenticeship, you must complete the Apprenticeship Application, take the Electrical Industry Aptitude Test, and achieve at least the minimum acceptable score. There is an application fee of \$40.00 that must be paid by cash, check or credit card (Discover, Master Card or Visa only) at the time of application. Please do not pay by cash if you are mailing in your application. If you prefer to pay by cash we ask that you bring your application and fee to our office.

The Electrical Industry Aptitude Test includes algebra and reading comprehension.

You may wish to brush up and refresh your algebra and/or reading comprehension skills. There are a number of resources available to do this. <a href="www.ElectricPrep.com">www.ElectricPrep.com</a> offers refresher courses to review key math and reading skills. There is a fee for these courses. You can register and pay online. This site has practice tests to assist you in refreshing your skills. You will also find a wealth of information on the internet, at your local library, or major book stores. If you google "algebra" you will see a number of sites that contain free worksheets or even free online tutoring. One excellent free resource for algebra comprehension brush up can be found at <a href="www.khanacademy.org">www.khanacademy.org</a>. This site includes various levels of math, worksheets and free online tutoring. Excellent free resources for reading comprehension brush up can be found at <a href="www.readtheory.org">www.readtheory.org</a> and <a href="www.englishforeveryone.org">www.englishforeveryone.org</a>. Another resource that has been recommended by people who have tested is workbooks published by Learning Express. They are "Algebra Comprehension, Success in 20 minutes a day" and "Reading Comprehension, Success in 20 minutes a day". GED Prep classes are also helpful classes to brush up on Algebra and Reading skills. These are free classes and available through many schools and technical colleges.

The suggestions listed above are not the only resources for refreshing your skills. You should use whatever method best suits you.

#### Reminders for Applicants:

- For optimal test performance, get a good night's rest and eat a nutritious meal prior to taking the test.
- Report to the test center early. It is a good idea to arrive at the test center at least 15 minutes before the scheduled testing time.
- On your scheduled test day, remember to bring a photo I.D. with you to the testing center. Your I.D. will be checked before you will be allowed to take the test. No ID, NO test - NO EXCEPTIONS!
- > Do not bring a calculator or any electronic calculating device. If you bring in a watch with a built-in calculator, you will be asked to remove it during the test session.

- > Plan on spending at least 3 hours at the test center on your scheduled test day. You will not be allowed to leave the testing center and return later to complete the test.
- Most applicants find they have enough time to complete each test question without rushing. Maintain a steady pace while testing.
- > Be sure to make arrangements for child care ahead of time. Children will not be allowed at the test center.
- ➢ If you do not pass the test this time, do not attempt to retake the test battery for 6 months after your last test date. If you retest before the 6 month period has elapsed, your score will not be valid and you will not be allowed to retest for another 6 months.
- Make arrangements with the JATC before you are scheduled for testing if you will need special accommodations during the testing procedure.

After the aptitude test is completed, the test is sent to an independent center for scoring. You will be informed by mail if you received a qualifying score or not. Exact scores will not be given.

If you are scheduled to take the aptitude test and have emergency situation arise that will interfere with your ability to attend the testing, you must call our JATC office immediately. A rescheduled opportunity to test is not guaranteed!

We are providing you with some "sample questions" for both Algebra and Reading Comprehension. These are not actual questions on the aptitude test. They are examples of questions you find on the test. These sample questions are designed to help you determine if you should brush up on your skills before testing.

Read each of the sample questions carefully and select the answer you feel is correct. Each question has only one correct answer. You can then check your answers with the sample test key provided. For best results, answer all questions before you check your answers with the test key.

#### Special Accommodations for Disabilities while testing.

We recognize and comply with all obligations covered by the Americans with Disabilities Act and do not discriminate against qualified persons with disabilities.

If you have a documented disability, physical or mental impairment (including learning disability) that you believe may affect your ability to complete any aspect of the application and/or aptitude testing process; and if you need an accommodation to ensure that the testing process accurately measures your abilities, please notify our JATC as soon as possible. This notification must be done no later than when you receive correspondence scheduling you for the aptitude test. Special accommodations cannot be made for any requests made on the same day you are scheduled to test.

To receive consideration for special accommodations, you will be required to provide documentation of your disability and documentation of the need for a particular accommodation. Your request will be considered promptly.

All applicants who receive a qualifying score on the aptitude test will be scheduled for a drug screen. Apprenticeship applicants who are already employed by a contractor will then be scheduled for apprenticeship orientation. Apprenticeship applicants who are not currently employed by a contractor will be placed on the "Eligible for Hire" list that is accessed by IBEW Local Unions referring applicants for employment.

# Sample Algebra and Function Test Questions

Below are three <u>sample questions</u> for the algebra portion of the test. This is a test of your ability to solve problems using algebra. Darken the circle for the correct answer.

1. Consider the following formula:

$$A = B + 3(4 - C)$$

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

- a7
- **ⓑ** 11
- © 12
- **d** 17

2. Consider the following formula:

$$y = 3(x + 5)(x - 2)$$

Which of the following formulas is equivalent to this one?

- (a)  $y = 3x^2 + 9x 30$
- ⓑ  $y = x^2 + 3x 10$
- ©  $y = 3x^2 + 3x 10$
- ①  $y = 3x^2 + 3x 30$

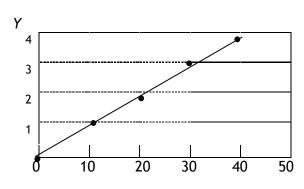
3. Consider the following equation:

$$Y = X + 5$$

Which of the following choices represents the same relationship as demonstrated in this equation?

- (a) Y/5
  10
  10
  15
  20
  20
  25
- $\bigcirc$  Y is equivalent to the sum of a constant C and X, where C equals 5.
- © Y = (X + 20) / 4

**@** 



# Sample Reading Comprehension Test Questions

This test measures you ability to obtain information from written text. Please read text and answer questions regarding that text. Darken the circle for the correct answer.

#### **TEXT**

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 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 Izapan in the southern Yucatan, the overhead date for the sun on its southward passage was August 13<sup>th</sup>. The Mayans celebrated this as the date for the beginning of the New Year. Later, at the more northerly Mayan site of Edzna, the corresponding overhead date is July 26<sup>th</sup>. Analyses of Mayan pictorial calendars indicate that they celebrated the New Year on August 13<sup>th</sup> prior to 150 AD and on July 26<sup>th</sup> after that year. This change has been explained by archeological dating showing that 150 AD was the time that the Mayans moved the hub of their civilization from the southern to the northern site.

- 1. According to the passage, the sun at Edzna was directly overhead at noon on"
  - a July 26<sup>th</sup> only.
  - **ⓑ** August 13<sup>th</sup> only.
  - © July 26<sup>th</sup> and one other date.
  - d August 13<sup>th</sup> and one other date.
- 2. If the Mayans 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 date?
  - a January 1<sup>st</sup>
  - ⓑ February 20<sup>th</sup>.
  - © March 25<sup>th</sup>.
  - d September 15<sup>th</sup>.
- 3. Why did the Mayans move their capital city from Izapa to Edzna?
  - The climate at Edzna was more temperate.
  - **b** Lunar eclipses were more visible at Edzna.
  - © The terrain near Edzna was more suitable for agriculture.
  - Cannot be determined from the information given.

# Test ANSWER KEY for Sample Aptitude Test Questions

### Algebra and Function Test

- 1. ⓐ **●** ⓒ ⓓ
- 2. **b c d**

## Reading Comprehension

- 1. ⓐ ⓑ ⓓ
- 2. **a b c** •
- 3. **a b c** •