

Welcome to the world of becoming an electrician.

# Thank you for visiting the IEC-Chesapeake web site and this particular Exam.

## Facts to know....

APPRENTICESHIP IS APPLIED LEARNING - you are employed (or will be employed) earning a wage while working as an electrician and learning the studies (related instruction) to achieve a career as an electrician. This is also referred to as: Earn while you Learn. Going through the apprenticeship requirement and becoming a journeyperson electrician is the first step in your career.

#### You will....

- ► have to know the various lines between the inches on a ruler/tape measure. i.e., 1-15/16 is? etc. This is critical in the electrical field.
- ▶ have to be to work on time and ready to go to work. Employers expect your best and being on time is critical to the completion of contract jobs.
- ▶ need to know, as an apprentice electrician, it will take 2,000 hours of on-the-job training and a minimum of 144 hours of related instruction to become a journeyperson electrician. This includes the NEC® Code Book. The Code Book is a reference and you will not be required to memorize the book but you will have to know how to use it and find code expediently.
- ▶ learn theory, calculations, wiring, transformers, motors and code (to name a few examples) as you go through your related instruction with IEC-Chesapeake.
- ▶ be required to know and practice safety at all times.

## Math need to know....

The math practice exam is design to assist you in identifying math problems that may show up on the entry level math exam required by IEC-Chesapeake. The actual entry level math exam will consist of 25 questions. Math is a requirement in the electrical field. It will become an important part of your studies. There is an instructor for each area of studies to assist when needed.



# IEC-Math Study Exam – Sample questions of what may be on a 25 question math exam

Four electricians work a total of 1280 hours on a job. Each works 8 hours a day, 5 days a week. How many weeks did each electrician work?

a. 7

c. 6

d. 8

The decimal equivalent of  $\frac{5}{16}$  is \_\_\_\_.

a. .516

b. .3125

c. .285

d. .375

e. 0.185

2.53 = \_\_\_\_%

a. 253

b. 25.3

c. 2,530

d. 2.53

e. .0253

 $^{1}/_{5} =$ \_\_\_\_% a. 0.2

b. 15

c. .15

d. 20

e. 200

An electrical contractor employs 240 electricians. This is 75% of the total number of employees. What is the total work force?

a. 180

b. 320

c. 255

d. 315



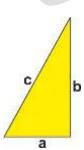
To the nearest  $^{1}/_{16}$ <sup>th</sup> inch, the width (left to right) is \_\_\_\_ inches.

a.  $1^{3}/_{8}$ 

b.  $1^{1}/_{2}$ 

c.  $1^{7}/_{16}$ 

d. 1<sup>9</sup>/<sub>16</sub>



The length of **a** is \_\_\_\_ where  $\mathbf{b} = 8^2/_3$ ' and  $\mathbf{c} = 9^1/_2$ '.

a.  $3'-10^{11}/_{16}$ " b.  $15'-1^{21}/_{32}$ " c. 81.5833' d. 10.954"

5/8 + <sup>3</sup>/<sub>4</sub> + 5/8 + 3-5/8 = \_\_\_\_ b. 5-1/2

a. 5-1/14

c. 5-7/8

d. 5-3/4

3. 5-5/8



Identify by letter: 2-1/4"

 $12\frac{7}{16} + 9\frac{31}{64}$ 

a. 22-19/32

b. 20-42/64

c. 21-59/64

22-7/16



Thank you for viewing our website and the math sample questions. These are only a sampling of the 25 questions on the entry level math exam. When you take the entry level math exam, you will have two hours to complete the exam. You will also be required to send in your math calculations for the questions that require calculations to arrive at the answer. If you have additional questions regarding our math exam, feel free to contact us at: Ssupport@chesapeake.com. We look forward to working with you.