JONES COUNTY CAREER-TECHNICAL CENTER

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March 31, 2020

Dear Parents and Career Tech Students:

From the Faculty, Staff and Administration of the Jones County Career Technical Center, it is our intent to provide enrichment activities for our students and support for our parents during these difficult times.

The following enrichment activities will allow students to review the instruction that they already have received this year.

You will find questions with answers for you to study and review. There are no assignments to be returned to school.

If the JCCTC can be of any assistance to our students and parents with the enrichment activities, please feel free to call us at 601-425-2378 between the hours of 9:00 a.m. and 1:00 p.m. or contact the instructor by email. Email addresses are located under the program name on our webpage.

Sincerely,

Rex Buckhaults

Rex Buckhaults
Director, JCCTC

Module 00101-15 Exam Basic Safety (Construction Site Safety Orientation)

1. The D-ring or support point on a safety harness should be placed _____.

a. between the shoulder blades
b. at the back of the neck
c. around the waist
d. over the rib cage

2. A personal fall arrest system should be inspected monthly by a _____.

a. co-worker
b. state safety inspector
c. project manager
d. competent person

3. Lanyards that have no shock-absorbing features are used for _____.

a. workers under 150 pounds
b. positioning
c. working on scaffolds
d. climbing ladders

4. When placing a ladder against a platform or roof, the top of the ladder should extend above the point where the ladder touches the platform or roof by at least _____.

a. 2 feet (61 cm)
b. 3 feet (91 cm)
c. 4 feet (1.2 m)
d. 5 feet (1.5 m)

5. When performing overhead work on scaffolding, what protective measures must be taken to prevent objects from falling and striking a person below?

a. Fall arrest systems are used.
b. Alarm systems should be enabled.
c. Toeboards, debris nets, or canopies must be applied.
d.Warning tags are posted on the scaffold.

Module 00102-15 Exam Introduction to Construction Math

1. An equivalent fraction to 5/16 is _____.

a. 5/32
b. 10/32
c. 1/2
d. 10/16

2. When reduced to its lowest terms, the fraction 12/16 would read as _____.

a. 3/4
b. 5/8
c. 8/12
d. 12/8

3. The improper fraction 37/6 can be changed to the mixed number _____.

a. 6
b. 5-7/16
c. 6-1/6
d. 37

4. 1/4 + 3/8 = _____. Reduce your answer to the lowest terms.

a. 4/8
b. 1/2
c. 5/8
d. 5/4

5. 8/12 - 4/8 = _____. Reduce your answer to the lowest terms.

a. 4/24
b. 2/14
c. 1/7
d. 1/6

Module 00103-15 Exam Introduction to Hand Tools

1. How many sides does a hexagonal shape have?

a. Four
b. Five
c. Six
d. Seven

2. In what way is a spud wrench different from a pipe wrench?

a. It is not adjustable.
b. It has smooth jaws.
c. It is significantly shorter.
d. Using a handle extension is recommended.

3. To quickly run a nut onto a bolt that resists spinning it on with the fingers, you can drive the socket with a(n) _____.

a. striking wrench
b. open-end wrench
c. speed handle
d. breaker bar

4. Another common name for lineman pliers is _____.

a. locking pliers
b. tongue-and-groove pliers
c. needle-nose pliers
d. side cutters

5. Because of its stiffness, a folding rule is better than a cloth or steel tape for measuring _____.

a. vertical distance
b. horizontal distance
c. inside dimensions
d. circular diameters

Module 00104-15 Exam Introduction to Power Tools

8. Before you plug any saw into a power source, make sure the _____.

a. speed is set to Low
b. power switch is in the Off position
c. work has been clamped down
d. lower blade guard is pulled back

9. A saw that has a thin, one-piece blade that runs around guides at either end of the saw is a _____.

a. miter saw
b. bandsaw
c. saber saw
d. circular saw

10. A power miter saw combines a miter box with a _____.

a. bandsaw
b. circular saw
c. reciprocating saw
d. saber saw

11. An angle grinder is used to grind _____.

a. soft, porous materials
b. imperfections in wood
c. hard, heavy materials
d. nonmetals only

12. The adjustable tool rest on a bench grinder should be positioned _____.

a. 1/8 inch from the grinding wheel
b. 1/4 inch from the upper wheel guard
c. 1/2 inch from the lower guard
d. 3/4 inch from the wheel arbor

Module 00105-15 Exam Introduction to Construction Drawings

1. In the alphabet of lines, an area not included in the cutting line view is shown with _____.

a. break lines
b. object lines
c. section cuts
d. dimension lines

2. Gridlines are used to _____.

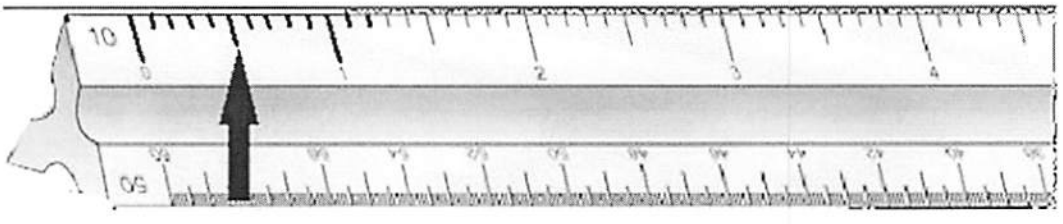
a. show changes in topography within a building structure
b. indicate that an object has been broken off
c. indicate land boundaries on a site plan
d. make it easy to refer to specific locations on a plan

3. A dimension is a measurement written as a _____.
a. range
b. number
c. letter
d. symbol

4. One way that an engineer's scale differs from an architectural scale is that the engineer's scale _____.

a. uses fractional values
b. is based on units of 10
c. cannot be used to scale long distances
d. is only used for drawings of machinery

5.



If 1 inch equals 10 feet, the arrow on the engineer's scale in the figure above indicates a length of _____.
a. 5 feet
b. 6 inches
c. 50 feet
d. 1/2 inch

Module 00106-15 Exam Introduction to Basic Rigging

1. Which style of hook is designed to be used on alloy steel chain slings?

a. Grab hook
b. Eye hook
c. Sliding hook
d. Short hook

2. To lift heavy loads, all chain hoists use a(n) _____.

a. sprocket set
b. anchorage slide
c. gear system
d. hook retainer

3. A type of hand-operated winching device that should never be used for vertical overhead lifting is a _____.

a. chain hoist
b. come-along
c. block and tackle
d. ratchet lever hoist

4. Two choker hitches are recommended when lifting a load longer than _____.

a. 6 feet (≈2 m)
b. 8 feet (≈2.5 m)
c. 10 feet (≈3 m)
d. 12 feet (≈3.5 m)

5. If an emergency occurs during a rigging operation, who is allowed to give the emergency stop hand signal?

a. Only another crane operator in the vicinity.
b. Only a designated signal person.
c. Only a qualified rigger who has completed signal training.
d. Anyone on the ground who is in site of the crane operator.

Module 00107-15 Exam Basic Communication Skills

1. Common documents that construction professionals need to read on the job include _____.

a. construction drawings, code books, and installation manuals
b. legal briefs, permits, and subpoenas
c. contracts, warrants, and encyclopedias
d. literary reviews, argumentation papers, and essays

2. Special features in books that help readers locate information include _____.

a. drawings and photographs
b. dictionaries and encyclopedias
c. tables of content, indexes, and glossaries
d. safety-related cautions and warnings

3. When reading instructions or a series of steps, one should _____.

a. read only the steps that he or she doesn't know
b. perform the steps even if he or she doesn't understand them
c. read the directions completely
d. skim the directions quickly

4. The rough draft of a document you are writing should _____.

a. follow an outline and incorporate your research
b. be as close to perfect as possible
c. be complete before any research has been done
d. be complete before an outline has been created

5. What is an important practice in writing to avoid errors that can cost time and money?

a. Handwriting any document before using a computer.
b. Always writing in the first person.
c. Proofreading the work for accuracy.
d. writing at a high reading grade level.

Module 00108-15 Exam Basic Employability Skills

1. Most employers advertise job openings _____.

a. in the local newspaper only
b. at the front desk
c. on the Internet
d. directly on the organizational chart

2. Critical thinking is the process of _____.

a. evaluating information, then reaching a conclusion or making a decision
b. searching for jobs, then applying and interviewing
c. distrusting new ideas
d. evaluating the need, then developing business

3. You will never stop learning better ways to solve problems if you are open to _____.

a. overtime
b. promotion
c. change
d. evaluation

4. When a problem-solving team includes a closed-minded person, that individual is one who _____.

a. does not get along well with others
b. lacks work ethics
c. tries to sabotage the project
d. distrusts any new ideas and resists change

5. The first step to solving a problem is to _____.

a. find a solution
b. define it
c. ask for help
d. have a plan

Module 00109-15 Exam Introduction to Material Handling

1. One common way to tie a clove hitch is to use two _____.

a. slip knots
b. half hitches
c. square knots
d. bowlines

2. When moving a material cart on an inclined or declined surface, be sure the _____.

a. load does not exceed the labeled weight capacity
b. hand brake is within your reach
c. hydraulic ram has been removed
d. load is cushioned with moving pads to prevent slippage

3. To transport a bottle of compressed gas, use a _____.

a. hand truck
b. cylinder cart
c. wheelbarrow
d. tunnel buggy

4. What device may have a rotating table surface and/or spikes on the table surface for a better grip?

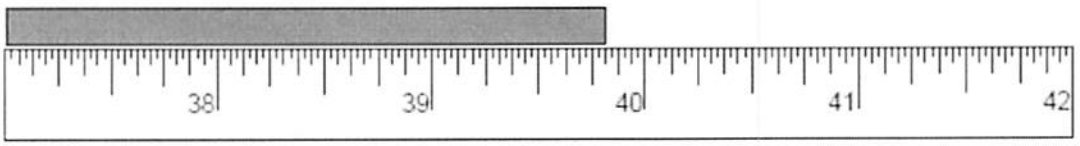
a. Roller skid
b. Pallet jack
c. Pallet conveyor
d. Accumulating conveyor

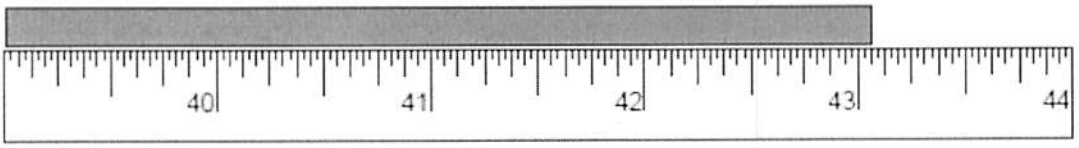
5. To work with motorized material-handling equipment, a worker must be _____.

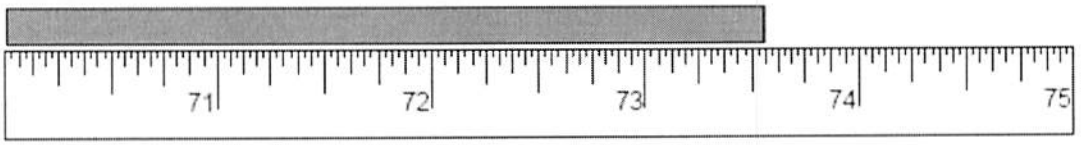
a. trained, certified, and authorized
b. experienced and knowledgeable
c. a job foreman or supervisor
d. licensed to drive

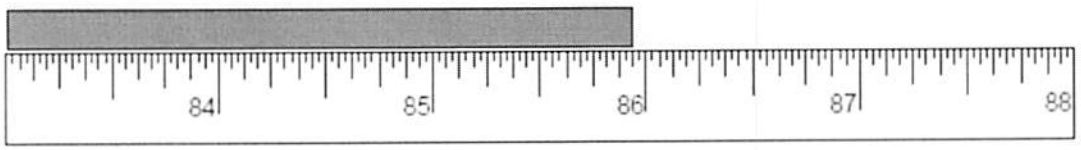
Reading a Tape Measure

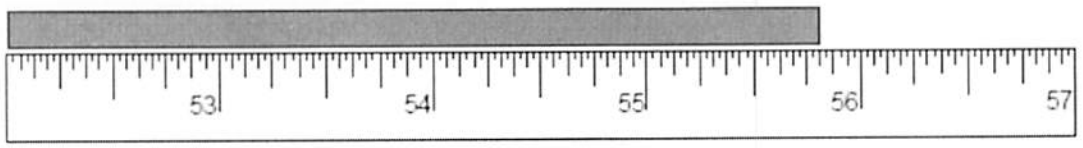
How many Feet and Inch

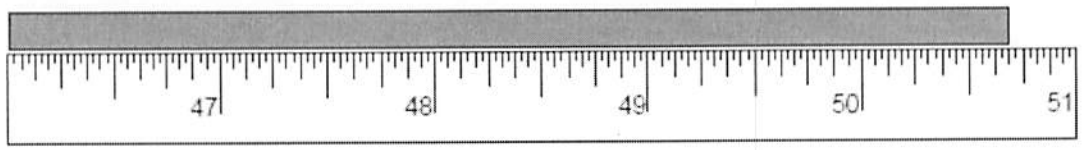


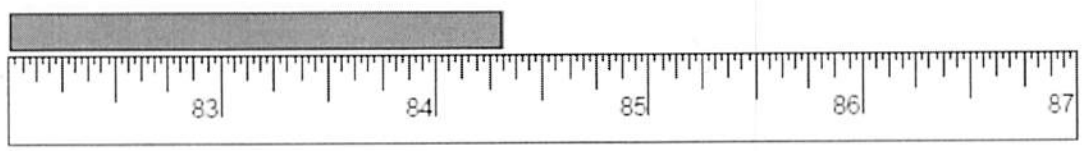


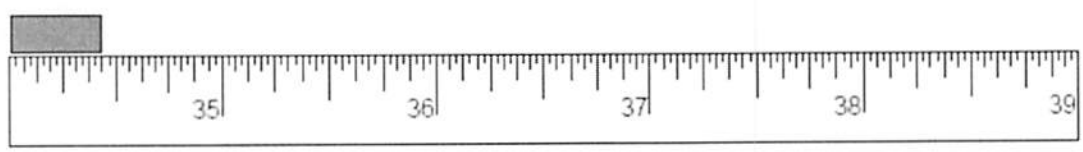












Module 00101-15 Exam Basic Safety (Construction Site Safety Orientation) 1st Year Welding

1. a
Page Ref: Sec. Ref. 2.2.2
Objective: 2b
2. d
Page Ref: Sec. Ref. 2.2.3
Objective: 2b
3. b
Page Ref: Sec. Ref. 2.2.4
Objective: 2b
4. b
Page Ref: Sec. Ref. 2.3.1
Objective: 2c
5. c
Page Ref: Sec. Ref. 3.1.1
Objective: 2d

Module 00102-15 Exam Introduction to Construction Math

1. b
Page Ref: Sec. Ref. 2.1.0
Objective: 2a
2. a
Page Ref: Sec. Ref. 2.1.2
Objective: 2a
3. c
Page Ref: Sec. Ref. 2.2.0
Objective: 2b
4. c
Page Ref: Sec. Ref. 2.3.0
Objective: 2c
5. d
Page Ref: Sec. Ref. 2.3.0
Objective: 2c

Core Curriculum Math Calculations

Question 1:

An equivalent fraction to 5/16 is _____.

Calculation:

$5/16 \times 2/2 = 10/32$

Question 2:

When reduced to its lowest terms, the fraction 12/16 would read as _____.

Calculation:

$12 \div 4 = 3$

$16 \div 4 = 4$

Question 3:

The improper fraction 37/6 can be changed to the mixed number _____.

Calculation:

$37 \div 6 = 6$, with a remainder of 1/16

Question 4:

1/4 + 3/8 = _____. Reduce your answer to the lowest terms.

Calculation:

1 × 2 = 2

4 × 2 = 8

2/8 + 3/8 = 5/8

Question 5:

8/12 – 4/8 = _____. Reduce your answer to the lowest terms.

Calculation:

8 × 2 = 16; 4 × 3 = 12

12 × 2 = 24; 8 × 3 = 24

16/24 – 12/24 = 4/24. Using 4 as a factor, reduces to 1/6.

Module 00103-15 Exam Introduction to Hand Tools

1. c
Page Ref: Sec. Ref. 1.4.1
Objective: 1d
2. b
Page Ref: Sec. Ref. 1.4.2
Objective: 1d
3. c
Page Ref: Sec. Ref. 1.5.1
Objective: 1e
4. d
Page Ref: Sec. Ref. 1.6.3
Objective: 1f
5. a
Page Ref: Sec. Ref. 2.1.3
Objective: 2a

Module 00104-15 Exam Introduction to Power Tools

1. b
Page Ref: Sec. Ref. 2.2.4
Objective: 2b
2. b
Page Ref: Sec. Ref. 2.3.0
Objective: 2c
3. b
Page Ref: Sec. Ref. 2.4.1
Objective: 2d
4. c
Page Ref: Sec. Ref. 3.1.0
Objective: 3a
5. a
Page Ref: Sec. Ref. 3.1.1
Objective: 3a

Module 00105-15 Exam Introduction to Construction Drawings

1. c
Page Ref: Sec. Ref. 1.3.1
Objective: 1c
2. c
Page Ref: Sec. Ref. 1.3.1
Objective: 1c
3. d
Page Ref: Sec. Ref. 1.3.3
Objective: 1c
4. b
Page Ref: Sec. Ref. 1.4.1
Objective: 1d
5. b
Page Ref: Sec. Ref. 1.5.3
Objective: 1e
6. a
Page Ref: Sec. Ref. 1.5.3
Objective: 1e

Module 00106-15 Exam Introduction to Basic Rigging

1. a
Page Ref: Sec. Ref. 1.3.4
Objective: 1c
2. c
Page Ref: Sec. Ref. 1.4.0
Objective: 1d
3. b
Page Ref: Sec. Ref. 1.4.2
Objective: 1d
4. d
Page Ref: Sec. Ref. 1.5.2
Objective: 1e
5. d
Page Ref: Sec. Ref. 1.5.4
Objective: 1e

Module 00107-15 Exam Basic Communication Skills

1. a
Page Ref: Sec. Ref. 2.1.0
Objective: 2a
2. c
Page Ref: Sec. Ref. 2.2.0
Objective: 2b
3. c
Page Ref: Sec. Ref. 2.2.0
Objective: 2b
4. a
Page Ref: Sec. Ref. 2.3.0
Objective: 2c
5. c
Page Ref: Sec. Ref. 2.3.0
Objective: 2c

Module 00108-15 Exam Basic Employability Skills

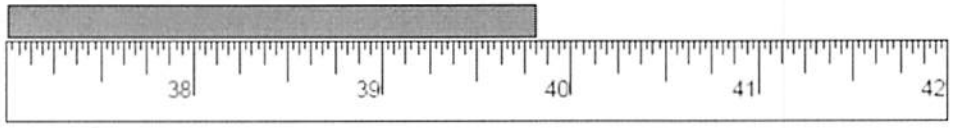
1. c
Page Ref: Sec. Ref. 1.2.0
Objective: 1b
2. a
Page Ref: Sec. Ref. 2.1.0
Objective: 2a
3. c
Page Ref: Sec. Ref. 2.1.1
Objective: 2a
4. d
Page Ref: Sec. Ref. 2.1.1
Objective: 2a
5. b
Page Ref: Sec. Ref. 2.2.0
Objective: 2b

Module 00109-15 Exam Introduction to Material Handling

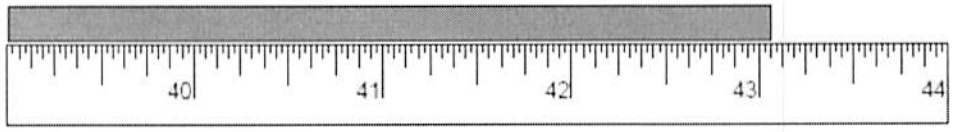
1. b
Page Ref: Sec. Ref. 1.3.4
Objective: 1c
2. a
Page Ref: Sec. Ref. 2.1.1
Objective: 2a
3. b
Page Ref: Sec. Ref. 2.1.3
Objective: 2a
4. a
Page Ref: Sec. Ref. 2.1.5
Objective: 2a
5. a
Page Ref: Sec. Ref. 2.2.0
Objective: 2b

Reading a Tape Measure

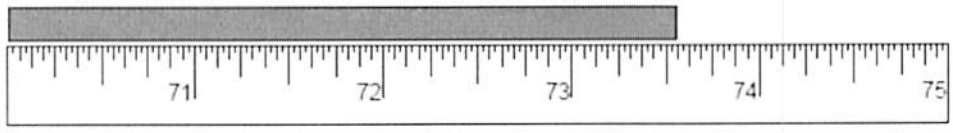
How many Feet and Inches ?



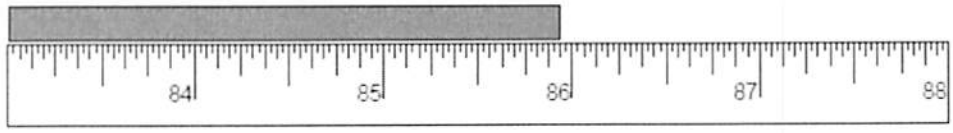
3 feet - $3\frac{13}{16}$ in



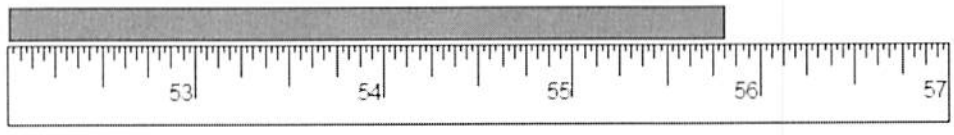
3 feet - $7\frac{1}{16}$ in



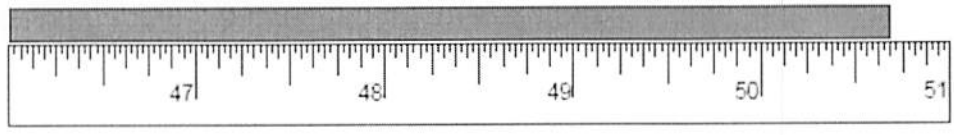
6 feet - $1\frac{9}{16}$ in



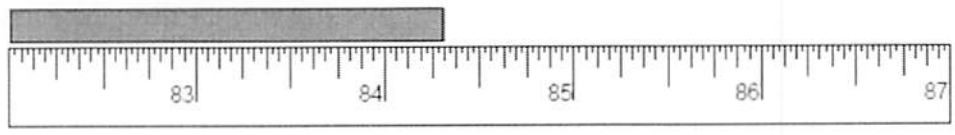
7 feet - $1\frac{15}{16}$ in



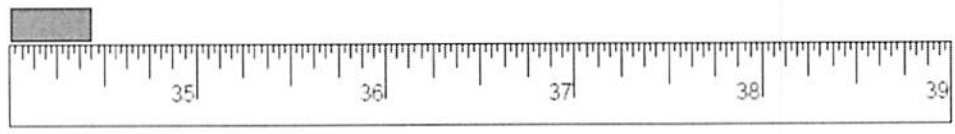
4 feet - $7\frac{13}{16}$ in



4 feet - $2\frac{11}{16}$ in



7 feet - $\frac{5}{16}$ in



2 feet - $10\frac{7}{16}$ in