CONSTRUCTION APTITUDE ASSESSMENT TEST
TO THE TEST PROCTOR:

BEFORE YOU BEGIN THE TEST:

Instruct test-takers to PRINT their names on their answer sheets, last name first. Then have them fill in today’s date in the date section. For the # section, have them fill in the number of their test packet (which can be found in the lower right hand corner on the cover.)

YOUR ROLE AS PROCTOR:

Your role during the test is to read out loud all of the directions for each section of the test to the test-takers. Your role also includes going over the sample problems, and answering any questions about the test that the test-takers may have. In addition, it is also your job to keep track of time, hand out scratch paper if allowed for that particular section of the test, and watch for cheating (i.e., using scratch paper when they’re not supposed to, skipping ahead to the next section of the test, going back to a previous section of the test.

For each section, make sure all test-takers are on the correct page for that section.

For each section, make sure all test-takers are at the corresponding place on their answer sheet BEFORE you give the word to begin.

Two minutes before the end of each test section, (except for multiplication) announce that the test-takers have two minutes left. When they have one minute left, announce that they have one minute left. When their time is up, announce that their time is up and have them put their pencils down before going on to the next section of the test.

When you have completed all of the test sections, collect the answer sheets, test booklets and pencils.

THANK YOU!
MULTIPLICATION TEST

DIRECTIONS:

This is a simple test of your knowledge of the multiplication tables. Each problem has 5 possible answers. Choose the correct answer and blacken the circle with the letter of your choice.

This exercise is to be done mentally. You may NOT use scrap paper or mark on the test paper.

Here is an example:

\[
2 \times 2 = \quad \begin{array}{l}
\text{a. 2} \\
\text{b. 1} \\
\text{c. 4} \\
\text{d. 6} \\
\text{e. 0}
\end{array}
\]

The correct answer is \textbf{4}, so you would blacken the circle for the letter \textbf{c}.

There are 40 problems on this test: you will have 3 minutes to complete them. Work as fast and as accurately as possible. If you make a mistake, quickly and completely erase your error and blacken in the correct circle.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO

DO NOT MAKE ANY MARKS ON THIS TEST PAPER
1. $4 \times 3 =$
   a. 9  b. 8  c. 10  d. 6  e. 12

2. $12 \times 5 =$
   a. 60  b. 50  c. 72  d. 62  e. 70

3. $5 \times 2 =$
   a. 12  b. 11  c. 5  d. 10  e. 7

4. $0 \times 6 =$
   a. 6  b. 0  c. 5  d. 10  e. 7

5. $4 \times 4 =$
   a. 12  b. 8  c. 16  d. 14  e. 20

6. $8 \times 7 =$
   a. 56  b. 49  c. 47  d. 63  e. 16

7. $9 \times 2 =$
   a. 11  b. 2  c. 18  d. 9  e. 8

8. $5 \times 3 =$
   a. 10  b. 15  c. 5  d. 3  e. 8

9. $6 \times 1 =$
   a. 1  b. 0  c. 6  d. 12  e. 7

10. $4 \times 5 =$
    a. 21  b. 18  c. 16  d. 22  e. 20

11. $7 \times 7 =$
    a. 49  b. 48  c. 56  d. 52  e. 46

12. $5 \times 6 =$
    a. 30  b. 27  c. 36  d. 40  e. 25

13. $8 \times 8 =$
    a. 72  b. 58  c. 64  d. 76  e. 65

14. $4 \times 6 =$
    a. 32  b. 26  c. 18  d. 24  e. 20

15. $9 \times 4 =$
    a. 34  b. 36  c. 26  d. 27  e. 37

16. $6 \times 3 =$
    a. 12  b. 19  c. 17  d. 36  e. 18

17. $4 \times 7 =$
    a. 21  b. 14  c. 28  d. 18  e. 26

18. $5 \times 8 =$
    a. 40  b. 42  c. 38  d. 35  e. 32

19. $8 \times 9 =$
    a. 64  b. 72  c. 58  d. 65  e. 56

20. $6 \times 7 =$
    a. 48  b. 32  c. 45  d. 42  e. 36

21. $4 \times 11 =$
    a. 40  b. 50  c. 41  d. 51  e. 44

22. $9 \times 0 =$
    a. 9  b. 10  c. 0  d. 1  e. 90

CONTINUE ON TO NEXT PAGE
23.  $11 \times 7 = $  
   a. 117  b. 77  c. 71  d. 11  e. 7

24.  $7 \times 3 = $  
   a. 21  b. 20  c. 18  d. 17  e. 27

25.  $8 \times 4 = $  
   a. 23  b. 24  c. 27  d. 32  e. 34

26.  $5 \times 11 = $  
   a. 65  b. 5  c. 11  d. 53  e. 55

27.  $9 \times 5 = $  
   a. 37  b. 43  c. 45  d. 47  e. 51

28.  $6 \times 5 = $  
   a. 30  b. 40  c. 11  d. 25  e. 35

29.  $8 \times 3 = $  
   a. 20  b. 24  c. 16  d. 33  e. 41

30.  $0 \times 4 = $  
   a. 0  b. 4  c. 40  d. 3  e. 6

31.  $7 \times 5 = $  
   a. 28  b. 27  c. 30  d. 35  e. 40

32.  $11 \times 8 = $  
   a. 91  b. 80  c. 88  d. 81  e. 78

33.  $12 \times 0 = $  
   a. 12  b. 1  c. 7  d. 0  e. 120

34.  $9 \times 3 = $  
   a. 27  b. 21  c. 25  d. 26  e. 28

35.  $11 \times 3 = $  
   a. 30  b. 33  c. 31  d. 27  e. 23

36.  $6 \times 6 = $  
   a. 32  b. 30  c. 28  d. 41  e. 36

37.  $7 \times 9 = $  
   a. 49  b. 56  c. 63  d. 81  e. 65

38.  $9 \times 6 = $  
   a. 48  b. 64  c. 57  d. 60  e. 54

39.  $0 \times 11 = $  
   a. 0  b. 11  c. 110  d. 1  e. 12

40.  $12 \times 3 = $  
   a. 24  b. 36  c. 27  d. 31  e. 34
VOCABULARY

DIRECTIONS:

This test measures your knowledge of English vocabulary specific to the trades: the ability to understand words and express ideas and thoughts.

Each test word is underlined and used in a phrase. From the five choices you are to choose the one which has the most similar meaning to the test word, and blacken the circle with the letter of the correct answer on your answer sheet.

Here is an example: He is a plumber.

One who works with:

a) cooking utensils  
b) Xerox machines  
c) internal combustion engines  
d) broken glass  
e) water and drains

The correct answer is water and drains; therefore you would blacken the circle e.

There are 22 questions on this test: you will have 6 minutes to complete them. Work as quickly and as accurately as possible. If you make a mistake, quickly and completely erase your error and blacken the correct circle.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO

DO NOT MAKE ANY MARKS ON THIS TEST PAPER
1. **Size of the footing**
   a. basement floor
   b. enlarged foundation wall base
   c. insulation
   d. space between ceiling and floor
   e. garage door opening

2. **Tell the steward**
   a. story pole
   b. roach coach driver
   c. management rep on jobsite
   d. union rep on jobsite
   e. labor superintendent

3. **IBEW members are**
   a. ironworkers
   b. engineers
   c. electricians
   d. brokers
   e. wheelwrights

4. **Blue collar workers**
   a. office
   b. manual
   c. masculine
   d. feminine
   e. finicky

5. **A plane ____ wood.**
   a. measures
   b. sinks
   c. carries
   d. shocks
   e. smooths

6. **Working seven 12s**
   a. 84 hours a week
   b. with seven other people
   c. over seven foot high
   d. in a 7 foot trench
   e. for $7 an hour

7. **Use the baker**
   a. extension ladder
   b. non-motorized scaffold
   c. motorized cherry-picker
   d. electrician’s fish tape
   e. mechanical screwdriver

8. **That plumber's a good mechanic**
   **One who:**
   a. knows his/her trade
   b. can fix cars
   c. is useless on the job
   d. doesn’t speak English
   e. finds fault with everything

9. **Hang the sheetrock**
   a. foreman
   b. electric fan
   c. girder
   d. curtains
   e. drywall

10. **Use metal studs for**
    a. concrete forms
    b. patio furniture
    c. tables
    d. floors
    e. walls

11. **A residential building**
    a. multi-office
    b. factory
    c. single family dwelling
    d. restored
    e. run-down

12. **Cut off the rebar**
    a. overhanging soffit
    b. electrical service
    c. reinforcing rod
    d. excess concrete
    e. temperature control
13. **Walk on the girder**  
a. I beam  
b. steel mesh  
c. painted line  
d. plastic mat  
e. corset

14. **Bring the Channellocks**  
a. wrench  
b. pliers  
c. padlock  
d. dead fish  
e. screwdriver

15. **Meet in the shanty**  
a. corporate office  
b. elevator shaft  
c. shed  
d. washroom  
e. parking lot

16. **A business agent represents**  
a. state government  
b. the city council  
c. the company’s president  
d. corporate headquarters  
e. a local union

17. **An isometric drawing is**  
a. a rough draft  
b. showing only a section  
c. drawn to size  
d. turned 30 degrees  
e. in full color

18. **Push the metal snake**  
a. panic button  
b. carpenter’s tool  
c. electrician’s tool  
d. ironworker’s tool  
e. glazier’s tool

19. **Call the EEO person**  
a. Electrical Engineer’s Office  
b. Equal Employment Opportunity  
c. English Employee’s Office  
d. Employment Entry Opportunity  
e. Industrial Empire Only

20. **An apprentice**  
a. goes to school  
b. gets paid to learn  
c. does menial labor  
d. learns from journeymen/women  
e. all of the above

21. **Carpenters often do form work**  
a. fill out paperwork  
b. build forms for concrete  
c. construct pea traps  
d. make elevator openings  
e. work overtime

22. **A hunting license allows you to**  
a. find your own job  
b. work non-union  
c. stalk ex-spouses  
d. study for licensing exams  
e. kill endangered species

STOP
READING COMPREHENSION

DIRECTIONS:

This test is used to assess how quickly and thoroughly you can comprehend what you read.

The test begins with a series of multiple choice questions for which you must finish the sentence by selecting one of four answers.

For example:

1. Most dogs can:
   a. run
   b. fly
   c. read
   d. talk

2. The electrician installed a switch
   a. around the living room.
   b. in the living room.
   c. the living room.
   d. on the living room.

Correct answers are A, for question 1 and B, for question 2.

Following these questions, you will be asked to read short passages and answer multiple choice questions about what you read.

There are 40 questions on this test and you will have 16 minutes to complete it. Work as fast and accurately as possible. If you make a mistake, completely erase your error and blacken the correct circle.

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DO NOT MAKE ANY MARKS ON THIS TEST PAPER
Choose the answer which best completes each sentence and mark the corresponding letter on your answer sheet.

1. **Doors usually have _____**.
   a. knobs  
   b. triggers  
   c. toes  
   d. sprinklers  
   e. all of these

2. **Screwdrivers have_____**.
   a. belts  
   b. handles  
   c. hair  
   d. frames  
   e. all of these

3. **Books have_____**.
   a. straws  
   b. pencils  
   c. pages  
   d. teeth  
   e. all of these

4. **Lights can have_____**.
   a. bulbs  
   b. cords  
   c. shades  
   d. switches  
   e. all of these

5. **His cut finger_____**.
   a. froze  
   b. looked  
   c. kicked  
   d. bled  
   e. whined

6. **Climb up the_____ to the roof**.
   a. grass  
   b. ladder  
   c. pillage  
   d. scale  
   e. pin

7. **Enlarged photographs are_____**.
   a. smaller  
   b. rounder  
   c. worse  
   d. greyer  
   e. bigger

8. **The electrical cord is unsafe to use because it is_____**.
   a. glass  
   b. orange  
   c. light  
   d. frayed  
   e. dull

9. **The old, dry fan belt is_____ and ready to snap**.
   a. roller  
   b. brittle  
   c. pliable  
   d. fluid  
   e. riled

10. **To shoot, aim the gun and pull the_____**.
    a. trigger  
    b. stock  
    c. barrel  
    d. bullet  
    e. sight

11. **A_____ knife will not cut well**.
    a. shiny  
    b. sharp  
    c. pretty  
    d. big  
    e. dull

12. **_____ flows downhill**.
    a. Trees  
    b. Clay  
    c. A tool  
    d. Water  
    e. Stones

13. **Look deep_____ yourself to find the truth**.
    a. beside  
    b. above  
    c. near  
    d. without  
    e. within

**CONTINUE ON TO NEXT PAGE**
14. Enter the yard through the front _____.
   a. gate       b. window       c. drain       d. attic       e. grate

15. You will find the _____ in the kitchen.
   a. car         b. refrigerator  c. giraffe     d. toilet      e. fence

16. Attach the pages together with a _____.
    a. pen          b. wrench      c. staple      d. book        e. stable

17. Rain falls from the _____.
    a. sky          b. floor       c. windfall    d. basement    e. lesion

18. A busboy takes dirty plates _____ the kitchen.
    a. from         b. buy         c. to          d. between    e. unto

19. The shuttle bus traveled _____ the terminal and the parking lot.
    a. among        b. on          c. between     d. at          e. along

20. The clerk put the product _____ the shelf.
    a. off          b. to          c. with        d. on          e. between

CONTINUE ON TO NEXT PAGE
The primary goal of the USHGA’s Board of Directors, Finance Committee, and Executive Committee is to insure that the USHGA returns to a sound financial footing, meaning to have in the bank sufficient funds to cover its membership obligations - paying for the magazine over a year period and for the third party liability insurance. The organization has already reduced costs by cutting office personnel or finding different personnel who can perform multiple functions. Currently the percentage of our income used for staffing is 17% while the typical staffing level in similar membership service organizations is 33% of income. (For example, the Soaring Society of America’s staff of ten people was 33% of income.) The USHGA, with a little less income from its members (the SSA has 12,000 members and the USHGA has 11,000), has four staff people.

The Planning Committee feels the need to develop a commonly agreed upon plan for the USHGA that goes beyond the current austerity program and promotes future growth specifically in the USHGA and in the hang gliding community in general. The committee produced a three sentence action plan. It allocated up to $10,000 to be paid to a planning facilitator (group or individual) who will guide the next BOD meeting through a planning process. Three or four individuals or groups will be interviewed and one chosen to lead this process at the Spring BOD meeting in Colorado Springs.

Answer the following questions by filling in the correct letter on your answer sheet:

21. **The leaders of the USHGA feel it is most important to:**
   a. achieve fiscal responsibility for individual committee members
   b. have sufficient funds to pay the staff
   c. cover its members’ insurance
   d. pay $10,000 to the Board of Directors
   e. have enough money to pay for insurance and publish their magazine

22. **Cost-cutting measures already implemented include:**
   a. laying off workers or finding those who can do several tasks
   b. paying lower salaries to committee members
   c. cutting multi-task workers while hiring specialists
   d. relying upon volunteers, plus the staff of four
   e. reducing staff overtime and hiring others for less money

23. **Which of these statements is correct?**
   a. The USHGA’s staff-to-income percentage is higher than similar groups
   b. The USHGA has more members than the SSA
   c. The SSA spends about one third of its income on staff
   d. The USHGA has 1100 members
   e. The SSA has four staff people
24. The Planning Committee ________.
   a. wants to develop a plan that keeps the current austerity program
   b. developed a very short action plan
   c. allocated more than $10,000 to a planning facilitator
   d. interviewed three or four individuals or groups
   e. chose a facilitator for the spring meeting in Colorado Springs

25. The USHGA’s primary interest concerns ________.
   a. handicap golf
   b. skiing
   c. hang gliding
   d. snowboarding
   e. historical gardens

SCUBA diving is quickly becoming the newest sport of the ages, and with good reason! It is fun, educational, purposeful, enlightening, transcending all social barriers. Young and not-so-young, male and female, rich and not-so-rich, all can enjoy exploring the underwater world with today’s equipment and classes. SCUBA is an acronym for the apparatus that allows divers to explore the ocean’s depths wearing self-contained equipment designed for breathing underwater. In 1825 William James created a simple facemask with a window, and a type of air tank believed to have been made of iron. SCUBA remained virtually unchanged and extremely dangerous until 1943, when Jacques Yves Cousteau modified James’ idea into the world’s first successful SCUBA equipment.

More than just fins and a mask, today’s SCUBA equipment consists of complex items which require careful maintenance and training in their use. Basic equipment consists of (but is not limited to) several items. Cylindrical air tanks, available in various capacities based on allowable air pressure (or psig), contain a mixture of nitrogen and oxygen, small amounts of water vapors, tiny amounts of carbon dioxide and several other gases. There are basically 2 ways to prepare compressed air for diving: by compressing air with a series of filters and air compressors, or by mixing 78 parts of pure nitrogen with pure oxygen. Tanks are equipped with submersible pressure gauges to monitor the exact air pressure inside the tank, and demand regulators that enable divers to breathe compressed air from the tank. Buoyancy control devices or BCDs are critical for the compensation of buoyancy variations beneath the surface, especially when traveling down from one depth to a lower one. Exposure suits protect the body from heat loss. The lighter wet suit is used in warmer waters while the dry suit provides protection in colder conditions, such as deep sea and lake waters.

Interested in viewing our great underwater world? Great!! Find a good SCUBA diving course taught by a certified professional diver, often offered at your local YMCA or "dive" shop. You will learn about the importance of health and fitness; the basics of snorkeling, skin, and scuba diving; the weather; water temperatures; water pressure; currents; underwater communication; underwater sound; decompression and non-decompression limits; indirect effects of pressure on the body as well as equipment; air tanks; air consumption; tank valves; pressure gauges; buoyancy control; compressed air; and last but not least, you will learn how to swim like a fish!!!
26. **SCUBA diving is recommended because it ______.**
   a. is enlightening, educational and expensive
   b. cuts across social barriers and is fun for all ages
   c. is purposeless and can be enjoyed by rich and not rich
   d. can be enjoyed only by those without social barriers
   e. is limited to rich old men and women

27. **The UBA in SCUBA stands for _____**.
   a. unusual breathing activity
   b. unique bivalve activity
   c. underwater breathing apparatus
   d. unconditionally brief accolade
   e. underwater buoyancy aquatics

28. **Compressed air tank mixtures include_____**.
   a. carbon dioxide, oxygen and nitrogen
   b. nitrogen, water and gas
   c. oxygen, carbon monoxide and nitrogen
   d. water vapor, hydrogen and oxygen
   e. psigs, gasses and nitrogen

29. _____ are not included under basic SCUBA equipment.
   a. Cylindrical air tanks and buoyancy control devices
   b. Wet and dry suits
   c. Pressure gauges and demand regulators
   d. Screw-down dive helmets and a bowie knife
   e. Compressed air tanks and exposure suits

30. **In a tropical dive, a malfunction of the _____ would be the least life-threatening.**
   a. air tanks
   b. pressure gauge
   c. demand regulator
   d. buoyancy control device
   e. wet suit

CONTINUE ON TO NEXT PAGE
Dog shows are the crème de la crème of the purebred canine world. To attain the coveted Best In Show (BIS), a dog registered with the American Kennel Club must first be entered into the appropriate conformation class in a selected show where dogs compete with others of their breed against written breed standards. Some classes are age specific (the 6-12 month or 12-18 month puppy classes), while others like the Bred by Exhibitor, or American Bred classes are self-explanatory. However others need more explanation. Dogs who are 6 months and older who have not won more than the designated number of ribbons or points may be entered in the Novice Class. The Open Class is for dogs 6 months or older, usually more mature and experienced, including Champions of record and foreign born dogs (who may only be shown in this or a puppy class). First place winners of the previous classes are then shown in the Winners’ Class, where the Winner is awarded points based on the number of dogs entered in the combined classes. A Reserve Winner, who receives no points, is also chosen. Males compete first, then each of the preceding Classes is repeated for females.

All of the winners of the various classes next compete, with any Champions of record, for Best of Breed, Best of Opposite Sex (to Best of Breed) and Best of Winners (both Winner’s Dog and Winner’s Bitch). The Best of Breed winner advances to compete in one of 7 Groups with the other breed winners. These Groups are designated by function. There is a Sporting Group for gun dogs and retrievers, and a Hound Group for the air-and ground scenting dogs, as well as the sight hounds. Next is the Working Group for sled and guard dogs, followed by the Terrier Group for dogs bred to “go to ground” to dig out varmints. The Toy Group is for dogs bred to raise an alarm but not primarily to protect, while the Non Sporting Group covers dogs bred for multiple purposes not covered by any of the above groups. Last is the Herding Group for dogs bred to work stock. First place winners from each of these groups compete for the prestigious ribbon, trophy and title: Best In Show.

Answer the following questions by filling in the correct letter on your answer sheet:

31. **A two year old Swedish-bred dog shown by the owner’s friend could compete in the _____ Class.**
   a. Novice  
   b. 12 to 18 month Puppy  
   c. Bred by Exhibitor  
   d. 6 to 12 month Puppy  
   e. Open

32. **Which of these statements is incorrect?**
   a. There is no age limit listed for Bred by Exhibitor Class  
   b. There are more restrictions on entry to the Open or Novice classes than to a Puppy class  
   c. Novice Class dogs are usually less experienced than Open dogs  
   d. There is a Class specifically for Senior dogs  
   e. Reserve Winners receive no points
33. In this article, the word Dog (with the capital D) refers to a_____.
   a. dog of one specific breed
   b. young dog
   c. female dog
   d. dog of either sex
   e. male dog only

34. An Afghan, who uses its eyes to spot prey, would be shown in the _____ Group.
   a. Sporting
   b. Hound
   c. Working
   d. Terrier
   e. Herding

35. The Doberman and the Siberian Husky belong in the _____ Group.
   a. Sporting
   b. Herding
   c. Terrier
   d. Working
   e. Hound

If the following guidelines are observed, Title IIA funds may be used to improve the effectiveness of grammar school teachers and principals. Training is covered for data interpretation; how to involve parents in the education process, integrate technology into the curricula, and improve student behavior; effective instructional strategies; different student learning styles; or one or more of a teacher’s core academic subjects. How teachers can work in collaborative groups is also covered. Types of eligible expenditures include the obvious, such as registration fees for conferences and workshops, and training materials for teachers, but also some that may not be commonly considered. In this category are: travel reimbursement or conferences and workshops; stipends for teachers attending professional development activities after school hours or during the summer; membership fees to professional organizations; and subscriptions to professional magazines or journals. Dues for national education associations, or tuition for college courses necessary for certification or re-certification for staff members are also examples of allowable expenses.

Principals should consider using Title IIA funds for the LEAP Conference, as it is partially covered. For more information about this, call Dick James at 555-542-1234 after February 23, or contact Mary Rogers at SURF. Sending any teacher(s) to conferences covering any of the above-mentioned topics, or ordering books, videos or software for use in educating school staff on the above topics would be a valid use of Title IIA funds. (A partial list of approved vendors is available upon request. If you wish to use a provider not on the list, ask them to apply for a vendor number by filling out the Supplier’s Application Form. To locate this form, go to www.csc.cps.k12.us).
Answer the following questions by filling in the correct letter on your answer sheet.

36. **Title IIA money could be used for training of_____.**
   a. parents and principals  
   b. janitorial staff and teacher aides  
   c. office clerks and teachers  
   d. teachers and principals  
   e. truant officers and teachers

37. **Title IIA funds could not be used for which of these workshop topics?**
   a. Teachers Work Together  
   b. Using Computers in the Classroom  
   c. Parenting Skills  
   d. How to Lessen Disruptive Conduct of Students  
   e. Students Different Styles

38. **Which of these things should someone wishing to use Title IIA funds do?**
   a. keep toll and lodging receipts from conferences (s)he attended  
   b. charge travel expenses for away football games to the school’s credit card  
   c. buy clothing with the school’s logo  
   d. ask for a stipend for going to the zoo during a school day fieldtrip  
   e. expect to be reimbursed for paying the principal’s salary

39. **Membership dues to which organization would be covered under Title IIA?**
   a. Professional Truckdriver’s Association  
   b. National Association of Elementary School Principals  
   c. United States Alliance of Grammarians  
   d. American Hysterical Society  
   e. National Society of University Professors

40. **Which of these statements is correct?**
   a. Contact Dick at SURF or Mary at 555-542-1234 for more information.  
   b. A website is listed for the LEAP Conference.  
   c. Only vendors on the approved list may be used.  
   d. To go to the LEAP Conference, fill out the Supplier’s Application Form.  
   e. Dick James may be called after the third week in February.
MEASURING TEST

DIRECTIONS:

This test measures your ability to identify the points marked on a 6 inch ruler. Make certain that all of your answers are complete and reduced to lowest possible terms. (Note that the last inch is divided into 32nds.)

For each question, neatly write your answer on the line provided. Writing legibly is essential on this test. Any illegible or questionable numbers will be marked as incorrect.

There are 18 questions on this test. You will have 4 minutes to complete them. Work as quickly and as accurately at possible. If you make a mistake, quickly and completely erase your error and enter the correct answer.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO

DO NOT MAKE ANY MARKS ON THIS TEST PAPER
MEASURING

On the answer sheet, identify the points marked on the 6" ruler below.
(Make sure all answers are complete and reduced to lowest possible terms.)

NOTE: The last inch is divided into 32nds.
SPATIAL VISUALIZATION

DIRECTIONS:

This test measures your ability to visualize in two and three dimensions by testing how well you can imagine where the holes will be when a piece of paper has been folded and punched.

The twelve problems on this test show a series of pictures on the left and the right. The left side shows the process of folding and then punching holes in a square piece of paper. From the pictures on the right, you are to choose the one that accurately shows what the paper will look like when it is unfolded.

This exercise is to be done in your imagination; you may not draw on scrap paper or mark on the test paper.

Here is an example:

The series below depicts the process from beginning to end, arriving at the answer to the above example, E.

There are 12 problems on this test. You will have 6 minutes to complete them. Work as quickly and as accurately as possible. If you make a mistake, quickly and completely erase your error and blacken the correct circle.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO

DO NOT MAKE ANY MARKS ON THIS TEST PAPER
1. A  B  C  D  E

2. A  B  C  D  E

3. A  B  C  D  E
10. A B C D E
   0 0 0 0 0

11. A B C D E
   0 0 0 0 0

12. A B C D E
   0 0 0 0 0
NUMERICAL REASONING

DIRECTIONS:

This test measures how well you can find a pattern in a series of numbers; the ability to solve numerical problems logically.

To solve the problems on this test, you must discover how the numbers in each series relate to each other and form a pattern. After studying each series, select the number that comes next and blacken the letter of the correct answer. Use the scratch paper provided to do your calculations.

Here is an example:

1. 2  4  6  8  10  a. 10  b. 14  c. 12  d. 32  e. 8

The correct answer is 12, because 2 is added to each preceding number. Therefore, you would blacken in the circle c.

There are 10 questions on this test. You will have 11 minutes to complete this test. Work as fast and as accurately as possible. If you make a mistake, quickly and completely erase your error and blacken in the correct circle.

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STOP
NUMERICAL COMPUTATION

DIRECTIONS:

This test measures your ability to solve arithmetic problems using addition, subtraction, multiplication and division.

This is a multiple choice test, providing five possible answers to each question. Choose the correct answer and blacken the corresponding letter, remembering that answers must be exact and, if fractions are involved, they must be reduced to the lowest terms. Please use the scratch paper provided to complete your calculations.

Here are two sample problems.

1. 6 + 5 =  a. 32    b. 10    c. 11    d. 17    e. 23
   2. 3/4 – 1/4 = a. 2/4    b. 2    c. 12    d. 1/2    e. 1/4

The correct answer to the first sample problem is 11. Therefore, you would blacken the c. The correct answer for the second problem is 1/2, or d, as opposed to 2/4 because fractions must be reduced to their lowest terms.

There are 26 questions on this test; you will have 9 minutes to complete them. Work as fast and as accurately as possible. If you make a mistake, quickly and completely erase your error and blacken in the correct circle.

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1. \( \frac{2}{5} + \frac{1}{5} = \)  
   a. \( \frac{3}{10} \)  
   b. \( \frac{4}{5} \)  
   c. \( \frac{3}{5} \)  
   d. \( \frac{1}{10} \)  
   e. \( \frac{1}{5} \)  

2. \( .3 + .4 + .7 = \)  
   a. \( 1.4 \)  
   b. \( 14 \)  
   c. \( 1.7 \)  
   d. \( .15 \)  
   e. \( 0 \)  

3. \( .9 - .2 = \)  
   a. \( .1 \)  
   b. \( .7 \)  
   c. \( 7.8 \)  
   d. \( .6 \)  
   e. \( 11 \)  

4. \( \frac{1}{3} + \frac{5}{6} = \)  
   a. \( \frac{4}{3} \)  
   b. \( \frac{4}{6} \)  
   c. \( \frac{6}{48} \)  
   d. \( \frac{7}{18} \)  
   e. \( \frac{1}{6} \)  

5. \( \frac{1}{5} + \frac{2}{7} = \)  
   a. \( \frac{17}{35} \)  
   b. \( \frac{3}{12} \)  
   c. \( \frac{2}{12} \)  
   d. \( \frac{3}{35} \)  
   e. \( \frac{3}{7} \)  

6. \( \frac{5}{8} - \frac{3}{8} = \)  
   a. \( \frac{8}{8} \)  
   b. \( \frac{2}{16} \)  
   c. \( \frac{1}{8} \)  
   d. \( \frac{3}{4} \)  
   e. \( \frac{1}{4} \)  

7. \( 6.34 \times 9 = \)  
   a. \( 5.706 \)  
   b. \( 57.07 \)  
   c. \( 5.77 \)  
   d. \( 57.06 \)  
   e. \( 50.6 \)  

8. \( 4.912 \div 16 = \)  
   a. \( 3.07 \)  
   b. \( 3.08 \)  
   c. \( 0 \)  
   d. \( 30.7 \)  
   e. \( .307 \)  

9. \( \frac{25}{37} - \frac{13}{37} = \)  
   a. \( \frac{12}{35} \)  
   b. \( \frac{12}{37} \)  
   c. \( \frac{12}{25} \)  
   d. \( \frac{38}{37} \)  
   e. \( 3/7 \)  

10. \( 5.3 + 70.6 = \)  
    a. \( 7.59 \)  
    b. \( 75.9 \)  
    c. \( 759 \)  
    d. \( .759 \)  
    e. \( 7 \)  

11. \( 9 \div 1 \frac{1}{4} = \)  
    a. \( 7 \frac{2}{5} \)  
    b. \( 7 \frac{1}{5} \)  
    c. \( 6 \frac{3}{5} \)  
    d. \( 7 \frac{5}{36} \)  
    e. \( 9/50 \)  

12. \( 1.65 - 1.49 = \)  
    a. \( 16 \)  
    b. \( 1.06 \)  
    c. \( .15 \)  
    d. \( 0.16 \)  
    e. \( .11 \)  

13. \( 5 - 3 \frac{1}{7} = \)  
    a. \( 2 \frac{6}{7} \)  
    b. \( 17/7 \)  
    c. \( 1 \frac{6}{7} \)  
    d. \( 1 \frac{5}{7} \)  
    e. \( 2 \frac{13}{14} \)  

14. \( 5 \times 4/5 = \)  
    a. \( 5 \frac{4}{5} \)  
    b. \( 4 \)  
    c. \( 5 \frac{5}{20} \)  
    d. \( 20 \frac{1}{5} \)  
    e. \( 5 \frac{1}{5} \)  

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<td>a. 571.2  b. 57.23  c. 5.712  d. 57.12  e. 57</td>
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<td>a. $\frac{6}{28}$ b. $\frac{3}{14}$ c. $\frac{8}{21}$ d. $\frac{6}{21}$ e. $\frac{6}{10}$</td>
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### READING

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**NUMERICAL REASONING**

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Chicago Women in Trades’ CONSTRUCTION APTITUDE ASSESSMENT TEST 31
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