# Accuplacer® Preparation Guide

"When you're prepared, you're more confident.
When you have a strategy, you're more comfortable."

Fred Couples



# OKLAHOMA CITY COMMUNITY COLLEGE

Office of Academic Advising
Division of Enrollment & Student Services
<a href="http://www.occc.edu/ACS/">http://www.occc.edu/ACS/</a>
405-682-7535

# **Frequently Asked Questions**

#### Why am I required to take the Accuplacer®?

We want you to be successful in your college career. Accuplacer® scores are a tool used to place you into college level classes appropriate for your skill level.

#### What if I fail?

The Accuplacer® is not pass/fail. We use it to as a placement tool only. For example, we would not want you to enroll in an English Composition class if you were struggling with reading or writing. The scores help us to properly assess your skills for placement into classes that are right for you.

# I have not been in school for awhile and I am afraid that I will not do well. What should I do?

We suggest you wait and take some time to review before taking the Accuplacer®. If it has been more than a year since you have taken a math class, or several years since taking an English class, your skills may be a little rusty. A few hours of preparation may be enough to refresh your memory and your skills. Generally we see higher scores from students who have taken time to prepare before taking the Accuplacer®. This guide is designed to provide resources for your preparation.

#### I want to take the Accuplacer® right away. Is that possible?

Yes, you have the option of taking the assessment without preparation. However, if you have not refreshed your skills, you may not place into the college level classes you wish to take. You are allowed to test one time without charge. You may test twice in a semester at an additional charge.

#### The following resources are included to guide your test preparation:

- 1. Preparation Guide for the Accuplacer® Test
  - a. Test-taking strategies
  - b. Descriptions of the tests
  - c. Links for online practice tests
- 2. Online Preparation Guide for Accuplacer®
  - a. Links to online test information
  - b. Links to online practice tests
- 3. Accuplacer® Sample Questions for Students
  - a. Test information from Accuplacer®
  - b. Sample Questions

#### Preparation Guide for the ACCUPLACER® (CPT)

#### We suggest the following test-taking strategies:

- 1. Rest: You will be able to concentrate better on the test if you get plenty of rest and eat properly prior to the test.
- 2. **Take your time:** The test is not timed. Relax and choose your answers carefully without worrying about the clock ticking.
- 3. **Read the directions:** Be sure you understand all the directions before you begin the test.
- 4. **Read carefully:** Be sure you understand exactly what each question requires.
- 5. **Think carefully:** The test requires you to complete or substitute information for parts of given sentences. Responses should reflect clear language use.
- 6. **Write before choosing an answer:** Use scratch paper to experiment with answers. Be sure to understand the given options before answering.
- 7. **Answer every question:** If you do not know the answer to a question, try to eliminate one or more choices. There is no penalty for guessing.

#### **Important Information:**

**Bring a photo ID:** You will need a photo ID to enter the test center.

**Calculator:** You are not allowed to use a handheld calculator. The program will provide an on-screen calculator on some questions but not all.

**Scores:** You will receive your scores immediately after testing. Bring them to Advising for placement information.

#### **Descriptions of the Tests:**

The following sample questions are similar to the format and content of the questions on the Accuplacer® test. Reviewing these samples will give you a good idea of how the test works and just what skills you may wish to review before taking the test itself.

#### 1. Reading Comprehension

This test is designed to measure how well you understand what you read. It contains 20 questions.

Some questions ask you to read passages of various lengths followed by a question based on the text. The reading passages can also be classified according to the kind of information processing required, including explicit statements related to the main idea, explicit statements related to a secondary idea, application, and inference. You will be asked to interpret and draw conclusions from what you have read.

The second type of question, sentence relationships, presents two sentences followed by a question about the relationship between these two sentences. You will be asked to decide how two sentences are related. The question may ask, for example, if the statement in the second sentence supports that in the first, if it contradicts it, or if it repeats the same information.

<u>Sample Questions for Reading Comprehension</u> http://ghc.ctc.edu/counseling/reading.htm

#### 2. Sentence Skills

Two kinds of questions are given in this test. The first type is sentence correction which requires an understanding of sentence structure. You will be asked to correct a sentence by choosing a word or phrase to substitute for an underlined portion of a sentence. In the other type of question, construction shift, you will be asked to rewrite a sentence in a specific way without changing the meaning. Within these two primary categories, the questions are also classified according to the skills being tested. Some questions deal with the logic of the sentence, others with whether or not the answer is a complete sentence, and still others with the relationship between coordination and subordination.

You will be presented a total of 20 questions.

<u>Sample Questions for Sentence Skills</u> http://ghc.ctc.edu/counseling/sentence.htm

#### 3. Arithmetic

This test measures your ability to perform basic arithmetic operations in three primary categories and to solve problems that involve fundamental arithmetic concepts. There are 17 questions on the Arithmetic tests, which are divided into three types.

#### a. Operations with whole numbers and fractions

Includes: addition, subtraction, multiplication, division, recognizing equivalent fractions and mixed numbers

#### b. Operations with decimals and percents

Includes: addition, subtraction, multiplication, and division percent problems, decimal recognition, fraction percent equivalencies, and estimation problems

#### c. Applications and problem solving

Includes: rate, percent, and measurement problems, geometry problems, distribution of a quantity into its fractional parts.

**Sample Questions for Arithmetic** 

http://ghc.ctc.edu/counseling/arithmetic.htm

#### 4. Elementary Algebra

There are three categories in the Elementary Algebra Test. A total of 12 questions are presented.

#### a. Operations with integers and rational numbers

Includes operations with integers and rational numbers, and computation with integers and negative rationals, the use of absolute values, and ordering.

#### b. Operations with algebraic expressions

Includes operations with algebraic expressions using evaluation of simple formulas and expressions, and adding and subtracting monomials and polynomials. Questions involve multiplying and dividing monomials and polynomials, the evaluation of positive rational roots and exponents, simplifying algebraic fractions, and factoring.

#### c. Equation solving, inequalities, and word problems

Involves translating written phrases into algebraic expressions and solving equations, inequalities, word problems, linear equations and inequalities, quadratic equations (by factoring), and verbal problems presented in an algebraic context.

#### Sample Questions for Elementary Algebra

http://ghc.ctc.edu/counseling/algebra.htm

#### 5. College-Level Mathematics

The College-Level Mathematics Test assesses proficiency from intermediate algebra through pre-calculus. Twenty questions are asked.

The categories covered include:

#### a. Algebraic operations

Includes: simplifying rational algebraic expressions, factoring and expanding polynomials, manipulating roots and exponents.

#### b. Solutions of equations and inequalities

Includes: the solution of linear and quadratic equations by factoring, expanding polynomials, manipulating roots and exponents.

#### c. Coordinate geometry

Includes: plane geometry, the coordinate plane, straight lines, conics, sets of points in a plane, graphs of algebraic functions.

#### d. Application and other algebra topics

Asks about: complex numbers, series and sequences, determinants, permutations, combinations, fractions, word problems.

#### e. Functions and trigonometry

Presents questions about: polynomial, algebraic, exponential, logarithmic, trigonometric functions.

#### Sample Questions for College-Level Mathematics

http://ghc.ctc.edu/counseling/math.htm

## Online Preparation Guide for Accuplacer®

## Reading, Writing, or Math Resources and Practice Tests

http://ghc.ctc.edu/counseling/reading.htm

http://studyguidezone.com/pdfs/accuplacerteststudyguide.pdf

http://www.testprepreview.com/accuplacer\_practice.htm

http://studyguidezone.com/resource\_tips.htm

http://www.montgomerycollege.edu/Departments/AssessCtr/accuplacer.htm

www.accuplacer-test.com

www.act.org

http://www.act.org/aap/pdf/preparing.pdf

http://www.actstudent.org/testprep/index.html

http://www.occc.edu/comlab/links.html

http://www.grammarbook.com/

http://owl.english.purdue.edu/handouts/grammar/

#### Notes:

#### **Math Resources and Practice Tests**

www.khanacademy.org

www.math.com

www.webmath.com

www.algebrahelp.com

www.mathgoodies.com

www.gcse.com/maths/algebra.htm

www.kidsolr.com/math/

www.purplemath.com/

www.mathleague.com/help/algebra/algebra.htm

www.sosmath.com

#### **Additional Resources**

Oklahoma City Community College Library

Free computer use to access links

http://www.learnatest.com/LEL/index.cfm/

http://www.occc.edu/Library/PracticeTests.html

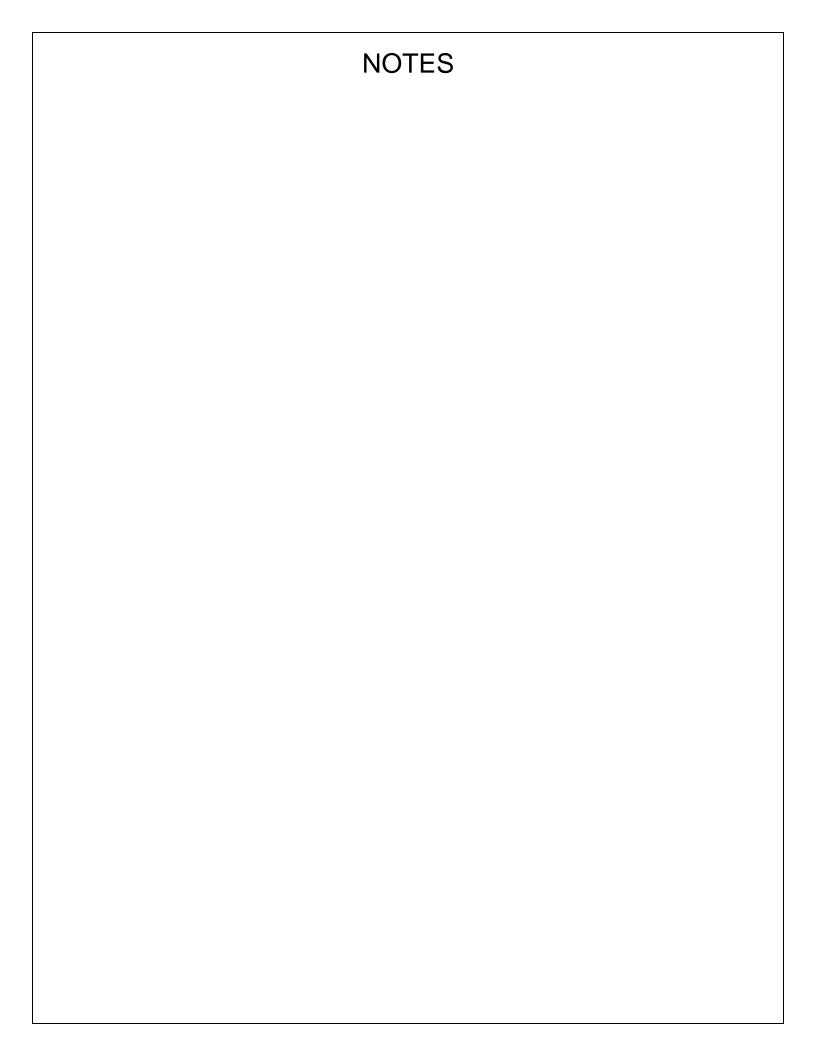
Math textbooks

English grammar books for spelling, punctuation, capitalization, relationship of clauses, verb tense and agreement, etc.

ACT review books for math and reading comprehension

Biology textbooks for A&P placement tests and Bio-D

#### Notes:





# **ACCUPLACER®**Sample Questions for Students

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#### Sentence Skills

In an ACCUPLACER® placement test, there are 20 Sentence Skills questions of two types.

- The first type is sentence correction questions that require an understanding of sentence structure. These questions ask you to choose the most appropriate word or phrase for the underlined portion of the sentence.
- The second type is construction shift questions.
   These questions ask that a sentence be rewritten according to the criteria shown while maintaining essentially the same meaning as the original sentence.

Within these two primary categories, the questions are also classified according to the skills being tested. Some questions deal with the logic of the sentence, others with whether or not the answer is a complete sentence, and still others with the relationship between coordination and subordination.

# Sentence Skills Sample Questions

#### Directions for questions 1-5

Select the best version of the underlined part of the sentence. The first choice is the same as the original sentence. If you think the original sentence is best, choose the first answer.

- 1. Stamp collecting being a hobby that is sometimes used in the schools to teach economics and social studies.
  - A. being a hobby that is
  - B. is a hobby because it is
  - C. which is a hobby
  - D. is a hobby
- 2. Knocked sideways, the statue looked as if it would fall.
  - A. Knocked sideways, the statue looked
  - B. The statue was knocked sideways, looked
  - C. The statue looked knocked sideways
  - D. The statue, looking knocked sideways,

- 3. <u>To walk, biking, and driving</u> are Pat's favorite ways of getting around.
  - A. To walk, biking, and driving
  - B. Walking, biking, and driving
  - C. To walk, biking, and to drive
  - D. To walk, to bike, and also driving
- 4. When you cross the street in the middle of the block, this is an example of jaywalking.
  - A. When you cross the street in the middle of the block, this
  - B. You cross the street in the middle of the block, this
  - C. Crossing the street in the middle of the block
  - D. The fact that you cross the street in the middle of the block
- 5. Walking by the corner the other day, <u>a child, I noticed, was watching</u> for the light to change.
  - A. a child, I noticed, was watching
  - B. I noticed a child watching
  - C. a child was watching, I noticed,
  - D. there was, I noticed, a child watching

#### Directions for questions 6-10

Rewrite the sentence in your head following the directions given below. Keep in mind that your new sentence should be well written and should have essentially the same meaning as the original sentence.

6. It is easy to carry solid objects without spilling them, but the same cannot be said of liquids.

Rewrite, beginning with

<u>Unlike liquids</u>,

The next words will be

- A. it is easy to
- B. we can easily
- C. solid objects can easily be
- D. solid objects are easy to be
- 7. Although the sandpiper is easily frightened by noise and light, it will bravely resist any force that threatens its nest.

Rewrite, beginning with

The sandpiper is easily frightened by noise and light,

The next words will be

- A. but it will bravely resist
- B. nevertheless bravely resisting
- C. and it will bravely resist
- D. even if bravely resisting

8. If he had enough strength, Todd would move the boulder.

Rewrite, beginning with

#### Todd cannot move the boulder

The next words will be

- A. when lacking
- B. because he
- C. although there
- D. without enough
- 9. The band began to play, and then the real party started.

Rewrite, beginning with

#### The real party started

The next words will be

- A. after the band began
- B. and the band began
- C. although the band began
- D. the band beginning
- 10. Chris heard no unusual noises when he listened in the park.

Rewrite, beginning with

#### Listening in the park,

The next words will be

- A. no unusual noises could be heard
- B. then Chris heard no unusual noises
- C. and hearing no unusual noises
- D. Chris heard no unusual noises

## **Reading Comprehension**

In an ACCUPLACER placement test, there are 20 questions of two primary types in Reading Comprehension.

- The first type of question consists of a reading passage followed by a question based on the text. Both short and long passages are provided. The reading passages can also be classified according to the kind of information processing required, including explicit statements related to the main idea, explicit statements related to a secondary idea, application, and inference.
- The second type of question, sentence relationships, presents two sentences followed by a question about the relationship between these two sentences. The question may ask, for example, if the statement in the second sentence supports that in the first, if it contradicts it, or if it repeats the same information.

# Reading Comprehension Sample Questions

Read the statement or passage and then choose the best answer to the question. Answer the question based on what is stated or implied in the statement or passage.

1. In the words of Thomas DeQuincey, "It is notorious that the memory strengthens as you lay burdens upon it." If, like most people, you have trouble recalling the names of those you have just met, try this: The next time you are introduced, plan to remember the names. Say to yourself, "I'll listen carefully; I'll repeat each person's name to be sure I've got it, and I will remember." You'll discover how effective this technique is and probably recall those names for the rest of your life.

The main idea of the paragraph maintains that the memory

- A. always operates at peak efficiency.
- B. breaks down under great strain.
- C. improves if it is used often.
- D. becomes unreliable if it tires.

2. Unemployment was the overriding fact of life when Franklin D. Roosevelt became president of the United States on March 4, 1933. An anomaly of the time was that the government did not systematically collect statistics of joblessness; actually it did not start doing so until 1940. The Bureau of Labor Statistics later estimated that 12,830,000 persons were out of work in 1933, about one-fourth of a civilian labor force of more than 51 million.

Roosevelt signed the Federal Emergency Relief Act on May 12, 1933. The president selected Harry L. Hopkins, who headed the New York relief program, to run FERA. A gifted administrator, Hopkins quickly put the program into high gear. He gathered a small staff in Washington and brought the state relief organizations into the FERA system. While the agency tried to provide all the necessities, food came first. City dwellers usually got an allowance for fuel, and rent for one month was provided in case of eviction.

This passage is primarily about

- A. unemployment in the 1930s.
- B. the effect of unemployment on United States families.
- C. President Franklin D. Roosevelt's presidency.
- D. President Roosevelt's FERA program.
- 3. It is said that a smile is universally understood. And nothing triggers a smile more universally than a taste of sugar. Nearly everyone loves sugar. Infant studies indicate that humans are born with an innate love of sweets. Based on statistics, a lot of people in Great Britain must be smiling because on average, every man, woman, and child in that country consumes 95 pounds of sugar each year.

From this passage it seems safe to conclude that the English

- A. do not know that too much sugar is unhealthy.
- B. eat desserts at every meal.
- C. are fonder of sweets than most people.
- D. have more cavities than any other people.
- 4. With varying success, many women around the world today struggle for equal rights. Historically, women have achieved greater equality with men during periods of social adversity. The following factors initiated the greatest number of improvements for women: violent revolution, world war, and the rigors of pioneering in an undeveloped land. In all three cases, the essential element that improved the status of women was a shortage of men, which required women to perform many of society's vital tasks.

We can conclude from the information in this passage that

- A. women today are highly successful in winning equal rights.
- B. only pioneer women have been considered equal to men.
- C. historically, women have only achieved equality through force.
- D. historically, the principle of equality alone has not been enough to secure women equal rights.

5. In 1848, Charles Burton of New York City made the first baby carriage, but people strongly objected to the vehicles because they said the carriage operators hit too many pedestrians. Still convinced that he had a good idea, Burton opened a factory in England. He obtained orders for the baby carriages from Queen Isabella II of Spain, Queen Victoria of England, and the Pasha of Egypt. The United States had to wait another 10 years before it got a carriage factory, and only 75 carriages were sold in the first year.

Even after the success of baby carriages in England,

- A. Charles Burton was a poor man.
- B. Americans were still reluctant to buy baby carriages.
- C. Americans purchased thousands of baby carriages.
- D. the United States bought more carriages than any other country.
- 6. All water molecules form six-sided structures as they freeze and become snow crystals. The shape of the crystal is determined by temperature, vapor, and wind conditions in the upper atmosphere. Snow crystals are always symmetrical because these conditions affect all six sides simultaneously.

The purpose of the passage is to present

- A. a personal observation.
- B. a solution to a problem.
- C. actual information.
- D. opposing scientific theories.

#### Directions for questions 7–10

For the questions that follow, two underlined sentences are followed by a question or statement. Read the sentences, then choose the best answer to the question or the best completion of the statement.

7. The Midwest is experiencing its worst drought in 15 years.

Corn and soybean prices are expected to be very high this year.

What does the second sentence do?

- A. It restates the idea found in the first.
- B. It states an effect.
- C. It gives an example.
- D. It analyzes the statement made in the first.
- 8. <u>Social studies classes focus on the complexity of our social</u> environment.

The subject combines the study of history and the social sciences and promotes skills in citizenship.

What does the second sentence do?

- A. It expands on the first sentence.
- B. It makes a contrast.
- C. It proposes a solution.
- D. It states an effect.

9. <u>Knowledge of another language fosters greater awareness of cultural diversity among the peoples of the world.</u>

<u>Individuals who have foreign language skills can appreciate</u> more readily other peoples' values and ways of life.

How are the two sentences related?

- A. They contradict each other.
- B. They present problems and solutions.
- C. They establish a contrast.
- D. They repeat the same idea.
- 10. Serving on a jury is an important obligation of citizenship.

Many companies allow their employees paid leaves of absence to serve on juries.

What does the second sentence do?

- A. It reinforces what is stated in the first.
- B. It explains what is stated in the first.
- C. It expands on the first.
- D. It draws a conclusion about what is stated in the first.

#### WritePlacer®

This test measures your ability to write effectively, which is critical to academic success.

Your writing sample will be scored on the basis of how effectively it communicates a whole message to the readers for the stated purpose. Your score will be based on your ability to express, organize, and support your opinions and ideas, not the position you take on the essay topic. The following five characteristics of writing will be considered:

- Focus—The clarity with which you maintain your main idea or point of view
- Organization—The clarity with which you structure your response and present a logical sequence of ideas
- Development and Support—The extent to which you elaborate on your ideas and the extent to which you present supporting details
- Sentence Structure—The effectiveness of your sentence structure
- Mechanical Conventions—The extent to which your writing is free of errors in usage and mechanics

## **WritePlacer Sample Topic**

Prepare a multiple-paragraph writing sample of about 300–600 words on the topic below. You should use the time available to plan, write, review, and edit what you have written. Read the assignment carefully before you begin to write.

Some schools require each student to participate in an organized school sport chosen by the student. People at these schools argue that athletics is an important part of the educational experience and that there should be a rule requiring participation. Others argue that students should be free to decide whether or not they wish to participate in organized school sports. Write an essay for a classroom instructor in which you take a position on whether participation in organized school athletics should be required. Be sure to defend your position with logical arguments and appropriate examples. Your essay must be 300–600 words in length.

#### **Arithmetic**

This test measures your ability to perform basic arithmetic operations and to solve problems that involve fundamental arithmetic concepts. There are 17 questions on the Arithmetic tests, divided into three types.

- Operations with whole numbers and fractions:
   Topics included in this category are addition, subtraction, multiplication, division, recognizing equivalent fractions and mixed numbers, and estimating.
- Operations with decimals and percents: Topics include addition, subtraction, multiplication, and division with decimals. Percent problems, recognition of decimals, fraction and percent equivalencies, and problems involving estimation are also given.
- Applications and problem solving: Topics include rate, percent, and measurement problems; simple geometry problems; and distribution of a quantity into its fractional parts.

# **Arithmetic Sample Questions**

Solve the following problems and select your answer from the choices given. You may use the paper you have been given for scratch paper.

- 1. 2.75 + .003 + .158 =
  - A. 4.36
  - B. 2.911
  - C. 0.436
  - D. 2.938
- 2.  $7.86 \times 4.6 =$ 
  - A. 36.156
  - B. 36.216
  - C. 351.56
  - D. 361.56
- 3.  $\frac{7}{20}$  =
  - A. 0.035
  - B. 0.858
  - C. 0.35
  - D. 3.5
- 4. Which of the following is the least?
  - A. 0.105
  - B. 0.501
  - C. 0.015
  - D. 0.15
- All of the following are ways to write 25 percent of N EXCEPT
  - A. 0.25 N
  - B.  $\frac{25N}{100}$
  - C.  $\frac{1}{4}$  N
  - D. 25 N
- 6. Which of the following is closest to  $27.8 \times 9.6$ ?
  - A. 280
  - B. 300
  - C. 2,800
  - D. 3,000
- 7. A soccer team played 160 games and won 65 percent of them. How many games did it win?
  - A. 94
  - B. 104
  - C. 114
  - D. 124

- 8. Three people who work full-time are to work together on a project, but their total time on the project is to be equivalent to that of only one person working full-time. If one of the people is budgeted for one-half of his time to the project and a second person for one-third of her time, what part of the third worker's time should be budgeted to this project?
  - A.  $\frac{1}{3}$
  - B.  $\frac{3}{5}$
  - C.  $\frac{1}{6}$
  - D.  $\frac{1}{8}$
- 9. 32 is 40 percent of what number?
  - A. 12.8
  - B. 128
  - C. 80
  - D. 800
- 10.  $3\frac{1}{3} 2\frac{2}{5} =$ 
  - A.  $1\frac{1}{2}$
  - B.  $\frac{1}{15}$
  - C.  $\frac{14}{15}$
  - D.  $1\frac{1}{15}$

## **Elementary Algebra**

A total of 12 questions of three types are administered in this test.

- The first type involves operations with integers and rational numbers, and includes computation with integers and negative rationals, the use of absolute values, and ordering.
- The second type involves operations with algebraic expressions using evaluation of simple formulas and expressions, and adding and subtracting monomials and polynomials. Questions involve multiplying and dividing monomials and polynomials, the evaluation of positive rational roots and exponents, simplifying algebraic fractions, and factoring.
- The third type of question involves translating written phrases into algebraic expressions and solving equations, inequalities, word problems, linear equations and inequalities, quadratic equations (by factoring), and verbal problems presented in an algebraic context.

# Elementary Algebra Sample Questions

Solve the following problems and select your answer from the choices given. You may use the paper you have been given for scratch paper.

- 1. If A represents the number of apples purchased at 15 cents each, and B represents the number of bananas purchased at 10 cents each, which of the following represents the total value of the purchases in cents?
  - A. A + B
  - B. 25(A + B)
  - C. 10A + 15B
  - D. 15A + 10B
- 2.  $\sqrt{2} \times \sqrt{15} = ?$ 
  - A. 17
  - B. 30
  - C.  $\sqrt{30}$
  - D.  $\sqrt{17}$
- 3. What is the value of the expression  $2x^2 + 3xy 4y^2$  when x = 2 and y = -4?
  - A. -80
  - B. 80
  - C. -32
  - D. 32
- 4. In the figure below, both circles have the same center, and the radius of the larger circle is *R*. If the radius of the smaller circle is 3 units less than *R*, which of the following represents the area of the shaded region?



- A.  $\pi R^2$
- B.  $\pi (R-3)^2$
- C.  $\pi R^2 \pi \times 3^2$
- D.  $\pi R^2 \pi (R 3)^2$
- 5.  $(3x 2y)^2 =$ 
  - A.  $9x^2 4y^2$
  - B.  $9x^2 + 4y^2$
  - C.  $9x^2 + 4y^2 6xy$
  - D.  $9x^2 + 4y^2 12xy$

- 6. If x > 2, then  $\frac{x^2 x 6}{x^2 4} =$ 
  - A.  $\frac{x-3}{2}$
  - B.  $\frac{x-3}{x-2}$
  - C.  $\frac{x-3}{x+2}$
  - D.  $\frac{3}{2}$
- 7.  $\frac{4-(-6)}{-5}=$ 
  - A.  $\frac{2}{5}$
  - B.  $-\frac{2}{5}$
  - C. 2
  - D. 2
- 8. If 2x 3(x + 4) = -5, then x =
  - A. 7
  - B. 7
  - C. 17
  - D. 17
- 9. -3(5-6)-4(2-3)=
  - A. 7
  - B. 7
  - C. 1
  - D. 1
- 10. Which of the following expressions is equivalent to  $20 \frac{4}{5}x \ge 16$ ?
  - A.  $x \le 5$
  - B.  $x \ge 5$
  - C.  $x \ge 32\frac{1}{2}$
  - D.  $x \le 32\frac{1}{2}$

# College-Level Mathematics Test

The College-Level Mathematics test measures your ability to solve problems that involve college-level mathematics concepts. There are six content areas measured on this test: (a) Algebraic Operations, (b) Solutions of Equations and Inequalities, (c) Coordinate Geometry, (d) Applications and other Algebra Topics, (e) Functions, and (f) Trigonometry. The Algebraic Operations content area includes the simplification of rational algebraic expressions, factoring and expanding polynomials, and manipulating roots and exponents. The Solutions of Equations and Inequalities content area includes the solution of linear and quadratic equations and inequalities, systems of equations, and other algebraic equations. The Coordinate Geometry content area presents questions involving plane geometry, the coordinate plane, straight lines, conics, sets of points in the plane, and graphs of algebraic functions. The Functions content area includes questions involving polynomial, algebraic, exponential, and logarithmic functions. The Trigonometry content area includes trigonometric functions. The Applications and other Algebra Topics content area contains complex numbers, series and sequences, determinants, permutations and combinations, factorials, and word problems. A total of 20 questions are administered on this test.

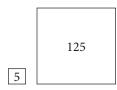
# **Sample Questions**

Solve the problem. Use the paper you were given for scratchwork.

- 1.  $2^{\frac{5}{2}} 2^{\frac{3}{2}}$ 
  - A.  $2^{\frac{1}{2}}$
  - B. 2
  - C.  $2^{\frac{3}{2}}$
  - D.  $2^{\frac{5}{3}}$
  - E.  $2^{2}$

- 2. If  $a \neq b$  and  $\frac{1}{x} + \frac{1}{a} = \frac{1}{b}$ , then x =
  - A.  $\frac{1}{h} \frac{1}{a}$
  - B. *b a*
  - C.  $\frac{1}{ab}$
  - D.  $\frac{a-b}{ab}$
  - E.  $\frac{ab}{a-b}$
- 3. If  $3x^2 2x + 7 = 0$ , then  $\left(x \frac{1}{3}\right)^2 =$ 
  - A.  $\frac{20}{9}$
  - B.  $\frac{7}{9}$
  - C.  $-\frac{7}{9}$
  - D.  $-\frac{8}{9}$
  - E.  $-\frac{20}{9}$
- 4. The graph of which of the following equations is a straight line parallel to the graph of y = 2x?
  - A. 4x y = 4
  - B. 2x 2y = 2
  - C. 2x y = 4
  - D. 2x + y = 2
  - E. x 2y = 4
- 5. An equation of the line that contains the origin and the point (1, 2) is
  - A. y = 2x
  - B. 2y = x
  - C. y = x 1
  - D. y = 2x + 1
  - E.  $\frac{y}{2} = x 1$
- 6. An apartment building contains 12 units consisting of one- and two-bedroom apartments that rent for \$360 and \$450 per month, respectively. When all units are rented, the total monthly rental is \$4,950. What is the number of two-bedroom apartments?
  - A. 3
  - B. 4
  - C. 5
  - D. 6
  - E. 7

7. If the two square regions in the figures below have the respective areas indicated in square yards, how many yards of fencing are needed to enclose the two regions?



- A.  $4\sqrt{130}$
- B.  $20\sqrt{10}$
- C.  $24\sqrt{5}$
- D. 100
- E.  $104\sqrt{5}$
- 8. If  $\log_{10} x = 3$ , then x =
  - A. 310
  - B. 1,000
  - C. 30
  - D.  $\frac{10}{3}$
  - E.  $\frac{3}{10}$
- 9. If f(x) = 2x + 1 and  $g(x) = \frac{x-1}{2}$ , then  $f(g(x)) = \frac{x-1}{2}$ 
  - A.
  - B.  $\frac{x-1}{4x+2}$
  - C.  $\frac{4x+2}{x-1}$
  - D.  $\frac{5x+1}{2}$
  - E.  $\frac{(2x+1)(x-1)}{2}$
- 10. If  $\theta$  is an acute angle and  $\sin \theta = \frac{1}{2}$ , then  $\cos \theta =$ 
  - A. -1
  - B. (
  - C.  $\frac{1}{2}$
  - D.  $\frac{\sqrt{3}}{2}$
  - E. 2

# ACCUPLACER ESL Reading Skills Test

The ESL Reading Skills test measures your ability to read English. Specifically, it assesses your comprehension of short passages. It contains brief passages of 50 words or less and moderate length passages of 50 to 90 words. Half of this test contains straightforward comprehension items (paraphrase, locating information, vocabulary on a phrase level, and pronoun reference). The other half assesses inference skills (main idea, fact versus opinion, cause/effect logic, identifying irrelevant information, author's point of view, and applying the author's logic to another situation).

## **Sample Questions**

1. Television has been introduced to almost every country in the world, reaching a large number of viewers on every continent. About 600 million people saw the first person walk on the moon, and a billion people watched the twentieth Olympic Games. Television has in many ways promoted understanding and cooperation among people. It does this by showing educational and cultural programs.

According to the passage, which of the following is true?

- A. Television is watched in nearly every country.
- B. Not everybody who had a television set could watch the 1998 World Cup finals.
- C. Watching television makes people dissatisfied with their own lives.
- D. Television was invented in 1980.
- 2. Janet's parents bought her a new sports car as a birthday present. It was blue. Janet sold her 7-year-old blue pickup truck to a high school student. The truck could not go very fast, but the student was happy with it.

According to the passage, which of these statements is true?

- A. Janet bought a pickup truck and a sports car.
- B. The pickup truck was faster than the sports car.
- C. The high school student traded cars with Janet.
- D. The pickup truck was older than the sports car.

 Some of Edward Weston's black-and-white photographs of American nature scenes are considered superb examples of visual art. Indeed, some of his photographs have commanded top prices at art galleries.

Which of the following best characterizes Weston's photographs?

- A. They belong to famous collectors.
- They have been sold in art galleries for large sums of money.
- C. They introduced many Americans to visual art.
- D. They contrast American cities with natural settings.
- 4. Speaking to a group of people can be a frightening experience. Some speakers cope by looking above the heads of the audience. Others try to imagine that they are talking to a friend. A few try picturing the audience in some non-threatening way, such as in their pajamas.

The author of the passage assumes that speakers should

- A. feel comfortable when addressing an audience.
- B. scare the audience.
- C. encourage people to talk during the speech.
- D. speak only to familiar people.
- 5. People have different ways of learning. Some are better at making mental pictures of new ideas. Others are more comfortable with writing lists of things to memorize. Certain people can learn best when listening to music, while others need silence to concentrate.

Which of the following is the main idea of the passage?

- A. Mental pictures help many to learn.
- B. Some people prefer lists to making mental pictures.
- C. To learn well you need to be comfortable.
- D. Different individuals have different ways of acquiring information.
- 6. Before giving first aid to an accident victim, you should obtain his or her consent. Asking for consent takes a simple question. Say to the victim, "I know first aid, and I can help you until an ambulance arrives. Is that okay?"

"Asking for consent" means asking for

- A. permission to help the victim.
- B. thanks from the victim.
- C. help from onlookers.
- D. information about the victim's injuries.
- 7. Jane and Paul are busy for 15 hours a day, 5 days a week going to college and working in a restaurant. They go to sleep at 11 p.m. every day, but on Sunday they take part in dance lessons.

According to the passage, Jane and Paul spend most of their time

- A. at home.
- B. going to college and working.
- C. taking part in dance lessons.
- D. sleeping.

8. If you hold a piece of copper wire over the flame of a match, heat will be conducted by the copper wire to your fingers, and you will be forced to drop the wire. You will, however, still be able to hold the match because the match is a poor conductor of heat. Anyone, child or adult, can try this simple experiment.

Which of the following is implied in the passage above?

- A. Copper is a good conductor of heat.
- B. A match and copper conduct heat equally.
- C. A match is an excellent conductor of heat.
- D. Matches should be kept out of the reach of small children.
- 9. Many people own different pets. Dogs, cats, birds, and fish are common household pets. Others pets are considered to be exotic animals. These include snakes, lizards, and hedgehogs.

#### Snakes are

- A. uncommon pets.
- B. likely to be found in a household with dogs.
- C. found only in zoos.
- D. not allowed in people's homes.
- 10. Cesar Chavez was an influential leader for farmworkers. He fought for their rights and better working conditions. Chavez led many strikes that angered farm owners. Eventually he succeeded in getting increased wages and improved living situations for farmworkers.

Chavez changed lives because he

- A. helped the farmers get more workers.
- B. worked for the farmers.
- C. helped work on the farms every day.
- D. changed the conditions for the farmworkers.

# **ACCUPLACER ESL Sentence Meaning Test**

The ESL Sentence Meaning test measures how well you understand the meaning of sentences in English. It assesses the understanding of word meanings in one- or two-sentence contexts. The sentences are drawn from the subject areas of natural science, history/social studies, arts/humanities, psychology/human relations, and practical situations. There are four content areas measured: (a) Particle, Phrasal Verbs, Prepositions of Direction; (b) Adverbs, Adjectives, Connectives Sequence; (c) Basic Nouns and Verbs; and (d) Basic and Important Idioms.

## **Sample Questions**

The sentence below has a blank space. Choose the word or phrase that makes the sentence meaningful and correct.

- 1. Shikibu Murasaki, who wrote almost a thousand years ago, was one of the world's \_\_\_\_ novelists.
  - A. most early
  - B. too early
  - C. more early
  - D. earliest
- 2. The Chang children \_\_\_\_ their parents by making sandwiches for the whole family.
  - A. helped out
  - B. helped with
  - C. helps for
  - D. helps to
- 3. As demonstrated by his last album, which was released after his death, Ibrahim Ferrer \_\_\_\_ one of the most beautiful voices in Latin music.
  - A. had
  - B. have
  - C. have had
  - D. having
- 4. After we saw the play, we had different opinions \_\_\_\_ Jane's performance.
  - A. about
  - B. at
  - C. for
  - D. towards

Each problem contains one or two sentences followed by a question. Choose the correct answer to the question.

5. Elena found a tomato that was much bigger than all the others in the garden.

How did the tomato compare to the others in the garden?

- A. It was the smallest.
- B. It was not very large.
- C. It was larger than some.
- D. It was the largest.
- 6. When the popular entertainer canceled her appearance, the Latin American festival was postponed indefinitely.

When will the festival likely take place?

- A. Tonight
- B. Tomorrow
- C. Next week
- D. Many weeks later
- 7. Janet is never late to meet her friends, and sometimes arrives early.

Which best describes Janet?

- A. Lonely
- B. Punctual
- C. Talkative
- D. Tardy
- 8. Bram Stoker is best known for his classic horror novel *Dracula*, which was published in 1897.

What did Bram Stoker do?

- A. He was a doctor.
- B. He was a merchant.
- C. He was a writer.
- D. He was an engineer.
- 9. Exhausted from her transatlantic flight, Judy could not stay up past 9 p.m.

What did Judy do at 9 p.m.?

- A. Leave work
- B. Come home from the airport
- C. Lose her enthusiasm
- D. Go to bed
- 10. This semester many students are enrolled in a new course, African Dance, which is being taught by a first-time instructor, Sheila Duncan.

How long has the university offered the African dance class?

- A. For a short time
- B. For many years
- C. For an entire school year
- D. On and off for a while

# ACCUPLACER ESL Language Use Test

The ESL Language Use test measures your proficiency in using correct grammar in English sentences. There are five content areas measured on this test: (a) Nouns, Pronouns, Pronoun Case Structure; (b) Subject–Verb Agreement; (c) Comparatives, Adverbs, Adjectives; (d) Verbs; and (e) Subordination/Coordination.

## **Sample Questions**

The sentence below has a blank space. Choose the word or phrase that makes a grammatically correct sentence.

1.	washing her sweater, Mary hung it up to dry.
	A. After
	B. Before
	C. By
	D. Until
2.	Some day men and women to Mars.
	A. will travel
	B. will travels
	C. will traveling
	D. will traveled
3.	Water at a temperature of zero degrees Celsius.
	A. having frozen
	B. freezing
	C. freeze
	D. freezes
4.	get a new haircut?
	A. Have you
	B. Does you
	C. Are you
	D. Did you
5.	Jacques Cousteau will be remembered for his inventions and
	for to marine science.
	A. dedication
	B. his dedication
	C. being dedicated
	D. his being dedicated
6.	Since my parents always insist that I get a good night's
	sleep, they were when I stayed out last night past my
	curfew.
	A. very happy
	B. very relieved
	C. very tired

Read the two sentences below and choose the best way of combining them.

- 7. Her puppy ran out into the street chasing a cat. The owner quickly went to retrieve it.
  - A. The owner quickly went to retrieve it after a cat was chased into the street by her puppy.
  - B. The owner quickly retrieved it after her puppy chased a cat into the street.
  - C. When her puppy ran into the street after a cat, the owner quickly went to retrieve the puppy.
  - D. Quickly retrieving it, the owner went quickly after her puppy that ran out into the street after a cat.
- 8. Lisa plays the piano. Her sister Kelly plays the piano, too.
  - A. Lisa and her sister Kelly plays the piano.
  - B. Both Lisa and her sister Kelly play the piano.
  - C. Lisa plays the piano and Kelly plays the piano.
  - D. Lisa and Kelly too play the piano.
- 9. The road was slippery. We put chains on the tires.
  - A. Although the road was slippery, we put chains on the tires.
  - B. The road became slippery when we put chains on the tires.
  - C. We put chains on the tires because the road was slippery.
  - D. Putting chains on the tires, the road we were on was slippery.
- 10. Kazuko took her dog for a walk. They went to the park.
  - A. Kazuko, going to the park, took her dog for a walk.
  - B. Kazuko took her dog for a walk in the park.
  - C. Kazuko took her dog for a walk because they went to the park.
  - D. Kazuko and her dog went to the park, where they walked.

D. very angry

# **Answer Key**

SENTENCE SKILLS	
QUESTION	CORRECT
NUMBER	ANSWER
1	D
2	A
3	В
4	С
5	В
6	С
7	A
8	В
9	A
10	D

ARITHMETIC	
QUESTION NUMBER	CORRECT ANSWER
1	В
2	А
3	С
4	С
5	D
6	А
7	В
8	С
9	С
10	С

READING COMPREHENSION	
QUESTION	CORRECT
NUMBER	ANSWER
1	С
2	D
3	С
4	D
5	В
6	С
7	В
8	А
9	D
10	А

ELEMENTARY ALGEBRA	
QUESTION	CORRECT
NUMBER	ANSWER
1	D
2	С
3	A
4	D
5	D
6	В
7	D
8	В
9	В
10	А

# **Answer Key**

CLM	
QUESTION	
NUMBER	CORRECT ANSWER
1	С
2	E
3	E
4	С
5	A
6	E
7	С
8	В
9	А
10	D

ESL SENTENCE MEANING QUESTION	
NUMBER	<b>CORRECT ANSWER</b>
1	D
2	А
3	А
4	А
5	D
6	D
7	В
8	С
9	D
10	А

ESL READING SKILLS OUESTION	
NUMBER	<b>CORRECT ANSWER</b>
1	A
2	D
3	В
4	A
5	D
6	A
7	В
8	A
9	A
10	D

ESL LANGUAGE USE QUESTION	
NUMBER	CORRECT ANSWER
1	А
2	А
3	D
4	D
5	В
6	D
7	С
8	В
9	С
10	В