



**BELMONT TECHNICAL COLLEGE®**

**ACCUPLACER**

**Placement Exam  
Study Guide**



**For more information on the admissions process:**

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St. Clairsville, Ohio 43950  
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**North Center  
Cadiz, Ohio  
(740) 942-2222**

## Placement Testing:

- 1) An application to the college must be completed and submitted prior to testing (a student ID number will be assigned, which is required for placement testing).
- 2) A photo ID is required.
- 3) Hand-held calculators are not allowed (However, some of the mathematics items within ACCUPLACER have pop-up calculators for students to use when answering some of the math questions. The items were written so that the use of a calculator will not help the student answer the question, but is provided simply as a tool for the student to use.)
- 4) Cell phones (and all electronic equipment) need to be turned completely OFF before entering the testing room.

For questions concerning the placement test, this study guide, guidelines for testing, or scheduling placement testing:

**Charles W. Kocher Student Success Center  
(740) 695-9500, Ext. 1080**

**Note:** If you are unfamiliar or uncomfortable using a computer, please let us know when you call to schedule your appointment. Additionally, if you require test accommodations due to a documented disability, please call: (740) 695-9500, Extension 1042 for information concerning your needs.

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# INSTRUCTIONS FOR STUDENTS

Belmont Technical College wishes every student great success in all academic pursuits. For this reason, we require our students to take a placement test, the Accuplacer. Accuplacer is a computerized placement test designed to provide useful information about students' level of academic skill in English, reading, and math. The results of the test determine the most appropriate "transitional studies" or college-level courses for students' current skill level. By assessing our students' skills, we hope to help them gain the necessary skills for success in college-level courses. Therefore, **it is very important to do your best** on this test.

The placement test consists of the parts listed below. However, the Elementary Algebra portion may or may not be administered, depending upon the score achieved on the Arithmetic portion. Students are encouraged to become familiar with all four portions to be most prepared for the test.

## Sentence Skills

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 to substitute 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 dependent and independent clauses.

## Reading Comprehension

There are 20 questions of two types on the Reading Comprehension test.

- The first type 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.

# Arithmetic Test

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.

## Algebra

A total of 12 questions are administered in this part of the 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.
- A 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 the solution of equations, inequalities, word problems, solving linear equations and inequalities, the solution of quadratic equations by factoring, solving verbal problems presented in an algebraic context, including geometric reasoning and graphing, and the translation of written phrases into algebraic expressions.

You cannot “pass” or “fail” this exam. It is a self-paced, untimed, multiple-choice test given on a computer. We would like to encourage you to **take as much time as you would like** to complete the exam and recommend you allow yourself at least two hours to avoid feeling rushed. The testing is adaptive, which means that the questions are chosen for you on the basis of your answers to previous questions. This technique selects just the right questions for your ability level. Because the test works this way, you must answer every question when it is given. You can change your answer to a particular question before moving on to the next question, but you cannot leave a question out or come back to it later to change your answer. **Pay careful attention to directions**, and be sure you understand the directions before you begin each part of the test. If you do not know the answer to a question, try to eliminate one or more of the choices. Also, as with any test, you will be able to concentrate better on the test if you get plenty of rest and eat properly prior to the test.

At the end of your testing session, the proctor will give you a copy of your scores, which you will then take to an academic advisor in order to register for classes.

## Sentence Skills Review

This review tests your understanding of sentence structure—how sentences are put together and what makes a sentence complete and clear. There are 20 questions on this review.

Before you begin, work the two sample questions to get the feel of the instructions. The correct answers are indicated.

Some questions on the review will ask you to *select the best version of the underlined part of the sentence*. The first choice is the same as the original. If you think the original sentence is best, choose the first one.

For example:

Mr. Wilson planning to teach a course in physics next fall.

- a. planning
- b. are planning
- c. with a plan
- d. plans

The correct answer is **d. plans**.

The revised sentence should read “Mr. Wilson plans to teach a course in physics next fall.”

In other questions, the review will ask you to *think through the sentences and the answer choices for a good revision*. A new sentence beginning is provided. Your new sentence should be well written and should have basically the same meaning as the original sentence. Rewrite the following:

Using the spell checker, she eliminated a number of errors on her paper.

Rewrite, beginning with She eliminated a number of errors on her paper...

The next words will be

- a. on account of she used
- b. by her using
- c. because she used
- d. being as she was using

The correct answer is **c. because she used**. The rewritten sentence should be “She eliminated a number of errors on her paper because she used the spell checker.”

For the *first three problems*, select the answer that is the best version of the underlined part of the sentence. The first choice is the same as the original. If you think the original sentence is best, choose the first one.

1. Working as a receptionist for my uncle’s business taught me to handle customer complaints, answering the telephone, and how to maintain a Rolodex.
  - a. to handle customer complaints, answering the telephone, and how to maintain a Rolodex.
  - b. how to handle customer complaints, answering the telephone, and maintaining a Rolodex.
  - c. how to handle customer complaints, how to answer the telephone, and how to maintain a Rolodex.
  - d. handling customer complaints, answering the telephone, and maintenance of a Rolodex.

2. Judy is dating a man that has a seven hundred-acre ranch near the foothills outside of town.
- a man that has a seven hundred-acre ranch near the foothills outside of town.
  - a man, that has a seven hundred-acre ranch near the foothills outside of town.
  - a man, who has a seven hundred-acre ranch near the foothills outside of town.
  - a man who has a seven hundred-acre ranch near the foothills outside of town.
3. These books, which was published in the late eighteenth century, are very valuable.
- books which was published in the late eighteenth century
  - books in the late eighteenth century
  - books, which were published
  - books, which is published, in the eighteenth century

For the following three problems, think through the sentences for a good revision. A new sentence beginning is provided. Your new sentence should be well written and should have basically the same meaning as the original sentence.

4. The hikers were at the bottom of the canyon, and they discovered an abandoned mineshaft.

Rewrite, beginning with After the hikers were...

The next words will be

- at the bottom of the canyon, and they discovered an abandoned mineshaft.
  - at the bottom of the canyon, they discovered an abandoned mineshaft.
  - at the bottom of the canyon they discovered an abandoned mineshaft.
  - at the bottom of the canyon when they discovered an abandoned mineshaft.
5. Good money managers control their present expenses, and they invest surplus dollars to meet their future needs.

Rewrite the sentence using because

The best choice will be

- Good money managers, because they control their present expenses, they invest surplus dollars to meet their future needs.
  - Because good money managers control their present expenses, they invest surplus dollars to meet their needs.
  - Because good money managers control their present expenses they invest surplus dollars to meet their needs.
  - Good money managers control their present expenses, because they invest surplus dollars to meet their future needs.
6. In a large city, you may have massive traffic jams on your daily commute to work.

Rewrite this sentence omitting you.

- In a large city, a person may have massive traffic jams on your daily commute to work.
- In a large city, a resident may have massive traffic jams on his daily commute to work.
- In a large city, massive traffic jams may be part of the daily commute to work.
- In a large city, massive traffic jams may be part of the everyday commute on the way to work.

In the *next three problems*, select the best version of the underlined part of the sentence or complete sentence. The first choice is the same as the original. If you think the original sentence is best, choose the first one.

7. Panting, the cab pulled away just as Judy arrived
- Panting, the cab pulled away
  - The cab pulled away panting
  - Panting, Judy arrived
  - Just as Judy was panting
8. We could watch the stars sitting on the balcony.
- We could watch the stars sitting on the balcony.
  - We could watch, sitting on the balcony, the stars.
  - We could watch on the balcony, the stars sitting.
  - Sitting on the balcony, we could watch the stars.
9. If a person wants to succeed in school, they have to study.
- they have to study.
  - he or she has to study.
  - they has to study.
  - he or she have to study.

For the following three problems, think through the sentences for a good revision. A new sentence beginning is provided. Your new sentence should be well written and should have basically the same meaning as the original sentence.

10. We ordered lobster since it was our anniversary.

Rewrite, beginning with Since it was our anniversary...

- Since it was our anniversary; we ordered lobster.
- Since it was our anniversary, we ordered lobster.
- Since it was our anniversary we ordered lobster.
- Since it was our anniversary, and we ordered lobster.

11. Tornadoes are winds which rotate in a counterclockwise direction and look like a funnel at the bottom of a cloud, as anyone who is familiar with Oklahoma weather knows.

Rewrite, beginning with Anyone who is familiar with Oklahoma weather...

Your new sentence will include

- knowing tornadoes
- and knows tornadoes
- has knowledge of tornadoes
- knows that tornadoes...

12. Our supervisor, Betty White, handles all of the personnel problems that arise because she is an extremely diplomatic person in working with people.

Rewrite, beginning with Being extremely diplomatic in working with people. The next words would be

- all of the personnel problems...
- our supervisor, Betty White, ...
- and that ...
- problems arising with personnel...

In the *next three problems*, select the best version of the underlined part of the sentence. The first choice is the same as the original. If you think the original sentence is best, choose the first one.

13. Chief Harrigan was invited to our safety meeting, he can demonstrate the correct use of fire extinguishers.

- a. Chief Harrigan was invited to our safety meeting, he can demonstrate the correct use of fire extinguishers.
- b. Chief Harrigan was invited to our safety meeting, therefore, he can demonstrate the correct use of fire extinguishers...
- c. Chief Harrigan was invited to our safety meeting; therefore to demonstrate the correct use of fire extinguishers.
- d. Chief Harrigan was invited to our safety meeting so that he can demonstrate the correct use of fire extinguishers.

14. Coming in from Fourth Street, the Student Union is seen by students who are arriving on campus.

- a. Student Union is seen by students who are arriving on campus.
- b. students who are arriving on campus see...
- c. the students having seen the Student Union...
- d. the Student Union is being seen...

15. Because modern machinery can function unattended, the unemployment rate may increase, this could possibly cause the poverty rate to be higher.

- a. this could possibly cause the poverty rate to be higher.
- b. possibly causing a higher poverty rate.
- c. the possible raising of the poverty rate will be the result
- d. this causes the poverty rate to increase.

For the following four problems, think through the sentences for a good revision. A new sentence beginning is provided. Your new sentence should be well written and should have basically the same meaning as the original sentence.

16. Due to the fact it was raining on the scheduled day of the picnic, the drama club had to cancel and reschedule a new date for the event.

Rewrite, beginning with The drama club had to... The next words should be

- a. due to the fact it was raining on the scheduled day of the picnic, cancel and reschedule a new date for the event.
- b. reschedule the picnic because of rain.
- c. cancel the picnic and reschedule it because of rain
- d. reschedule a new date for the picnic because it was canceled due to rain.

17. While it was raining, we decided to play cards.

Rewrite, beginning with We decided to play...

The next words should be

- a. cards while it was raining
- b. cards, while it was raining.
- c. cards; while it was raining.
- d. cards; but while it was raining.

18. While we were in Illinois, we visited General Grant's home.

Rewrite, beginning with We toured General Grant's...

The next words should be

- a. home, it is in Illinois.
- b. home, and it is in Illinois.
- c. home; in Illinois.
- d. home visiting in Illinois.

19. Tornadoes are made up of winds with speeds of 30 or 40 miles an hour or higher, and they cause the most deaths.

Rewrite, beginning with

Because tornadoes are made up of winds with speeds of 30 or 40 miles an hour or higher...

The next words should be

- a. and they cause the most deaths.
- b. causing the most deaths.
- c. the tornadoes causing the most deaths.
- d. , they cause the most deaths.

In the *next problem*, select the best version of the underlined part of the sentence. The first choice is the same as the original. If you think the original sentence is best, choose the first one.

20. If you want to create a beautiful room, having a large sum of money is not nearly so important to the finished setting as is the knowledge of basic decorating.

- a. as is the knowledge of basic decorating.
- b. as knowing the basics of decorating.
- c. but the knowledge of basic decorating.
- d. like the knowledge of basic decorating.

## ANSWERS TO ENGLISH REVIEW QUESTIONS

1. **c.** Parallel form is needed for expressing similar ideas. Repeating “how to” with each action accomplishes this.
2. **d.** When referring to a person or people, use the relative pronoun “who.” Since the clause beginning with “who” is essential to the meaning of the sentence, a comma is unnecessary. The reader needs to know “who” Judy is dating.
3. **c.** Use “were” for subject-verb agreement. “Which” is plural because it refers to “books.”
4. **b.** Introductory dependent clauses need a comma to set them off from the main clause. Sentences beginning with “after, when, if as, before, because, etc.” usually need a comma after the introductory dependent clause.
5. **b.** Sometimes sentences contain ideas that are unequal. If one idea explains the other, it is put in a subordinate (lesser) position. This idea should be expressed in a subordinate clause. A dependent clause at the beginning of a sentence must be followed by a comma.
6. **c.** Avoid using ambiguous references to “you.” Also, construct sentences for clarity. People don’t have traffic jams; cars do.
7. **c.** A misplaced modifier is a word or word group that is improperly separated from the word it modifies, making the sentence sound awkward, ridiculous, or confusing. An introductory verbal must modify the subject.
8. **d.** Modifiers should be close to the word they modify; otherwise, they are misplaced (see 7).
9. **b.** A pronoun must agree in number with the antecedent (word it modifies). “Person” is singular; “they” is plural, and this causes a shift in number. To avoid sexist language, both “he” and “she” are used to refer to “person” since “person” is not gender-specific.
10. **b.** When a dependent clause introduces a sentence, a comma is needed after the clause.
11. **d.** The new sentence upgrades the dependent clause “as anyone...knows” to an independent clause “Anyone ...knows.” The new sentence includes “knows that tornadoes are,” subordinating the main idea, “Tornadoes are winds...”
12. **b.** The dependent clause has been reduced to an introductory verbal phrase modifying the subject.
13. **d.** This sentence contains the error of a comma splice (two independent clauses separated by a comma only). One way to correct this is to subordinate a clause. When the dependent clause is at the end of a sentence, a comma is usually not necessary.
14. **b.** An introductory verbal phrase must modify the subject of the sentence.
15. **b.** The last two clauses contain a comma splice. To correct this, the last clause can be reduced to a verbal phrase modifying “increase.”
16. **b.** Avoid unnecessary words which can jumble the flow of the sentence.
17. **a.** When an independent clause is followed by a dependent clause, a comma is usually unnecessary.
18. **b.** Two independent clauses joined by a coordinating conjunction (*and, but, so, or, for, nor, yet*) need a comma after the first clause.

19. **d.** When a dependent clause introduces the sentence, a comma is needed after the clause.
20. **b.** For clarity, use parallel wording: “*having* a large sum of money...*knowing* the basics of decorating.”

ENGLISH REVIEW ANALYSIS	
IF YOU MISSED	STUDY KEY
1, 20	Parallel Form
2, 9	Pronoun Reference
3	Subject – Verb Agreement
4, 5, 10, 11, 12, 13, 17, 19	Dependent Clauses, Subordinating Ideas and Sentence Structure
6	Clarity
7, 8	Misplaced Modifiers
13, 15	Comma Splices
14	Verbal Phrases (Introductory)
16	Wordiness
18	Punctuating compound Sentences

# READING STRATEGIES AND DIAGNOSTIC TEST

Six skills prepare students to read more effectively and experience success in college-level courses:

- recognizing main ideas.
- identifying supporting details.
- recognizing implied main ideas and the central point.
- understanding relationships that involve addition and time.
- understanding relationships that involve illustration, comparison or contrast, and cause and effect.
- understanding purpose and tone.

## MAIN IDEA

In order to become a better and faster reader, recognizing the main idea is the most important skill you can develop.

Think of the **main idea** as an “umbrella” idea. It is the author’s primary point about a topic. All other material in the paragraph fits under the main idea. In a paragraph, authors often present the main idea to readers in a single sentence called the **topic sentence**.

Consider this example:

TV violence does affect people in negative ways. Frequent TV watchers are more fearful and suspicious of others. Heavy TV watchers are less upset about real-life violence than non-TV watchers. TV violence increases aggressive behavior in children.

The **topic** can be used in two different ways. First, *topic* can be used generally to mean the subject of the reading. Second, it can be used as a part of the phrase **topic sentence**. In this example, the first sentence tells the reader the general subject or topic of the passage. The second sentence is the **topic sentence**, giving the author’s main idea. This sentence tells the reader what the passage is about and gives the main point the author is making.

## SUPPORTING DETAILS

Supporting details are reasons, examples, steps, or other kinds of factual evidence that explain a main idea.

Consider this example:

**Main idea:** Our government should phase out the penny in the economy.

**Supporting detail 1:** Pennies take up more space than they are worth.

**Supporting detail 2:** Pennies are a nuisance to the business community.

**Supporting detail 3:** Pennies cost the nation as a whole.

In this case the supporting details give reasons to support the main idea.

## RECOGNIZING IMPLIED AND STATED IDEAS

Sometimes a selection lacks a topic sentence, but that does not mean it lacks a main idea. The author has simply decided to let the details of the selection suggest the main idea. You must figure out what that implied main idea is by deciding upon the point all of the details make when they are all added together.

Passages that imply an idea give supporting details first. The reader must extrapolate (or make an educated guess) in order to understand the main idea. In these sorts of passages, the main idea is the general statement that all of the details make when they are considered as a whole.

The main idea must be general enough that **all** of the details fit into it.

### Consider this example:

1. The smaller a group is, the more opportunities we have to get to know other people well and to establish close ties with them.
2. Two-person groups are the setting for many of our most intense and influential relationships.
3. In three-person groups, coalitions become possible, with two members joining force against a third member.
4. Five-person groups are large enough so that people feel they can express their emotions freely and even risk antagonizing one another, yet they are small enough so that members show regard for one another's feelings and needs.

Which statement best expresses the unstated main idea of the above sentences?

- a) Two-person groups are an important part of our lives.
- b) A five-person group is better than a two-person group
- c) The number of people in a group affects relationships within the group.**
- d) Groups play a central part in every human activity, within family, the workplace, and the government.

### Explanation:

- a. Answer *a* is too narrow to be the implied idea. It is based on only one of the four supporting details, statement 1.
- b. Answer *b* covers only statements 2 and 4; therefore it is too narrow to be the implied main idea. In addition, it is a conclusion that is not based on the given facts, which say nothing about one group always being better than another.
- c. Answer *c* is a general statement about the number of people in a group and how that number affects a group. It is illustrated by all four of the supporting details. **So, answer c is the implied main idea.**
- d. Answer *d* is true, but it is not what the supporting details are about. The supporting details do not address the part that groups play in society.

If you have trouble focusing in on an implied main idea, remember that finding the topic may help.

For instance, you probably soon realized that the topic of the supporting ideas above is the number of people in a group. Then you could have asked yourself, "What are the supporting details saying about the number of people in a group?" As you thought about the four statements, you would try to find a point about the number of people in a group that is general enough to cover all of the specific details.

## UNDERSTANDING RELATIONSHIPS THAT INVOLVE ADDITION AND TIME

To help readers understand the main points, authors use two common methods to show relationships among ideas and to make ideas clear. These two methods are **transitions** and **patterns of organization**.

Transitions are words or phrases (like “first of all”) that show relationships between ideas.

Two forms of transition are words that show

- addition, contrast, or exception.
- time or sequence.

*Addition words* tell you that writers are adding to their thoughts. The writers are presenting one or more ideas that continue along the same line of thought as a previous idea. Addition words include *furthermore*, *additionally*, *next*, *in addition*.

*Contrast words* show differences between two or more items being compared. Contrast words include *on the other hand*, *in contrast*, *despite*.

*Exception words* point out an unusual or unique feature of one item that is otherwise part of the same main category. Exception words include *however*, *nevertheless*, *with the exception of*, *in the case of*.

*Time words* provide chronological organization to writing. Time words include *later* or *during* followed by a specific time period such as a decade, a year, a month, a week, or a century: e.g. the 90s, the nineteenth century.

*Sequential words* provide step-by-step organization to writing. Sequential words include *next*, *first*, *second*, *after*, *before*.

## UNDERSTANDING RELATIONSHIPS THAT INVOLVE ILLUSTRATION, COMPARISON OR CONTRAST, AND CAUSE AND EFFECT

Illustration is one method of clarifying our ideas. Writers often use examples and illustrations introduced by a phrase such as *for example* or *for instance* to demonstrate the point they are trying to make.

Which of these two statements is easier to understand?

1. Even very young children can do household chores. They can run a duster along baseboards or fold napkins for dinner.
2. Even very young children can do household chores. For instance, they can run a duster along baseboards or fold a napkin for dinner.

The second item is easier to understand because the phrase *for instance* tells the reader that there is a relationship between the first and second sentence. The second sentence offers an example of the point the author makes in the first sentence.

## COMPARISON AND CONTRAST:

**Comparison** shows similarities.

**Contrast** shows differences.

Writers often use comparison and contrast together as a way of explaining and or analyzing the relationship between or among items, ideas, or people.

Consider the relationship among these sentences as an example of how comparison and contrast can be used together and *notice the role that the underlined transitions play in making this relationship clear to the reader.*

1. Advertising is part of the strategy manufacturers use to sell their products
2. Manufacturers use advertising as a way to advertise established products as well as new products.
3. New products are generally advertised differently from established products.
4. New products are often introduced with informational advertising telling what the products are, why they are needed, and where they are available.
5. Established products on the other hand can rely on reminder, advertisements that provide little hard information about the product.

The first sentence of this paragraph gives the general, or main, idea. The second sentence uses *as well as* to signal that the writer is showing a similarity between the way new and established products are advertised. The word *differently* in the third sentence and on the other hand in the fifth sentence shows that the writer is also showing differences in the way these two types of products are advertised.

## Cause/Effect

Information that falls into a cause-effect pattern addresses itself to the questions. “Why does an event happen? What are the results of an event?” Often authors try to tell about events in a way that explains both what happened and why.

Consider how this passage reflects the relationship between cause and effect:

In 1970 about sixty small and medium-sized factories in the United States adopted a four day workweek. According to the plan, workers work forty hours, but instead of the usual five-day week, they now work only four days. Workers are enthusiastic about the three-day weekly vacation. According to management, productivity has increased about 18% since the inception of the new plan. Absenteeism has dropped by 69% and lateness is almost non-existent.

What are the effects being discussed in this passage?

- A. shorter work weeks
- B. sixty small and medium-sized factories decided to try the four-day work week
- C. the seventies were a time of change
- D. increased productivity and decreases in absenteeism and tardiness**

## Explanation:

- a. Answer *a* gives the topic of the passage but does not discuss cause or effect.
- b. Answer *b* explains who was involved in this experiment, but does not show a cause/effect relationship.
- c. Answer *c* is true, but is not discussed in this passage.

## STONE

A writer's tone reveals the attitude he or she has toward a subject. Tone is expressed through the words and details the author selects. Just as a speaker's voice can project a range of feelings, a writer's voice can project one or more tones, or feelings: anger, sympathy, hopefulness, sadness, respect, and dislike. Understanding tone is then an important part of understanding what an author has written.

To illustrate the difference, a writer can express in tone, consider the following comments made by workers in a fast food restaurant.

- I hate this job. The customers are rude, the managers are idiots, and the food smells like dog chow. (Tone: bitter, angry.)
- I have no doubt that flipping burgers and toasting buns will prepare me for a top position on Wall Street. (Tone: mocking, sarcastic.)
- I love working at Burger Barn. I meet interesting people, earn extra money, and get to eat all the chicken nuggets I want when I go on break. (Tone: enthusiastic, positive.)

Words that express tone reflect a feeling or judgment. Some words that describe tone include *amused*, *angry*, *ashamed*, *praising*, and *excited*.

## READING DIAGNOSTIC TEST

The following contains 20 questions, a section with **Reading Strategies** that provides explanations of all problems included on the test, and a **Key** with suggestions for review that you can use for the questions you missed.

1. ANSWER EACH OF THE 20 QUESTIONS.
  2. SCORE YOUR TEST WITH THE KEY THAT IS PROVIDED AND EVALUATE YOUR SCORE USING THE SCALE.
  3. IF YOU MADE LESS THAN 70%, USE THE SECTIONS FROM THE READING STRATEGIES SECTION IN PARENTHESES FOLLOWING THE CORRECT ANSWERS ON THE KEY TO REVIEW THE QUESTIONS YOU MISSED.
  4. AFTER YOU HAVE COMPLETED THE REVIEW, TAKE THE TEST AGAIN.
1. Read the statements below and then choose the best answer to the question from the list of lettered choices that follows.

Sometimes when we don't get enough sleep, we become very short-tempered. It is important to set a time to go to bed that is realistic.

How are these two sentences related?

- A. The first sentence explains the meaning of the second.
  - B. The second sentence explains why a lack of sleep affects us.
  - C. The second sentence contradicts the first.
  - D. The second sentence proposes a solution.
2. Read the statements below and then choose the best answer to the question from the list of lettered choices that follows.

Most people collect *Star Wars* toys for sentimental reasons.  
Some people collect them strictly to make money.

What is the relationship between the two sentences?

- A. cause & effect
- B. contrast
- C. repetition
- D. statement & example

3. Answer the question based on what is stated or implied.

There are two kinds of jewelry that I do. There is commercial jewelry. Class rings, necklaces, the kinds of things most people wear. I sell these items to meet my expenses for raw materials, supplies, and to make my living. The other, more creative work I do makes me feel that I am developing as a craftsperson.

The author of this passage implies that:

- A. artists are poor.
  - B. there is no market for creative work.
  - C. rings and necklaces can not be creative.
  - D. commercial and creative work fulfills different needs for the artist.
4. Read the passage below and choose the one organizational pattern from the lettered choices following the passage that best describes the way the author organized this paragraph.

Did you know that the U.S. postal service handles 40% of the world's mail volume? Japan is the second largest carrier of cards and letters, but it handles only 8% of the world's mail. Perhaps the reason that the U.S. handles such a large volume of mail is the large number of personal letters American citizens write. Personal letters do not require a strict format, but they do have a few guidelines. The date should be written at the top of the letter, either in the center or in the right hand corner. The salutation, "Dear \_\_\_\_\_," should begin the letter and should be followed by a comma instead of a colon, which is used in the salutation of a business letter. The body of the letter should sound like you and say the things you intend to say. Unlike in a business letter, you can use slang words, dashes, smiley faces, sentence fragments, and other kinds of casual forms of communication. Closings for personal letters are also a matter of personal preference. While a business letter requires you to use more formal closings such as "Sincerely, Regards, or Best Wishes," a personal letter can end with more casual phrases such as "Later, Talk to you soon, or Bye" As with the rest of the letter, the closing should express your own feelings.

- A. Cause and Effect
  - B. Example
  - C. Comparison and Contrast
  - D. Humor
5. Read the statements below and then choose the best answer to the question.

Jenny does not like cake.  
She does not like to bake it, to ice it, or to eat it.  
What does the second sentence do?

- A. It states the cause of the first.
- B. It emphasizes what is stated in the first.
- C. It compares the three things Jenny does not like about cake.
- D. It draws a conclusion about Jenny.

Read the sentences below and then choose the best answer to the question.

6. When we write a check that we know is going to "bounce," we are in fact performing a criminal act. It is a crime to knowingly write a "hot" check, one we know we don't have sufficient funds to cover. What does the second statement do?
- A. It provides supporting evidence for the first statement.
  - B. It draws a conclusion from the first sentence.
  - C. It restates the central idea of the first sentence.
  - D. It provides a contradictory point of view.

7. Read the statements below and then choose the best answer to the question from the list of lettered choices that follows.

The new *Dance Tunes* CD has proved to be very popular.  
It has sold 80,000 copies over the last year.

How are these two sentences related?

- A. The first sentence explains the meaning of the second.
  - B. The second sentence explains why the CD is popular.
  - C. The second sentence provides evidence of the first.
  - D. The first sentence contradicts the second.
8. Read the passage below and then choose the best answer to the question from the list of lettered choices that follows.

Before the invention of automobiles and airplanes, travel was a slow process. When traveling long distances, families would be out of communication until the travelers reached their destination. Sometimes people lost touch with each other permanently.

The author would most likely continue the passage with which of the following sentences?

- A. Advances in communication have helped travelers stay in communication.
  - B. Airplanes make travel more fun
  - C. Driving a car helps families stay in touch.
  - D. Cars can be used to travel comfortably.
9. Read the passage below and then choose the best answer to the question.

Scuba diving is the most exhilarating experience I have ever had. The first time I went, the dark mirror of the water beckoned me to drop from the side of the boat. I jumped feet first and entered a brightly colored world populated with fish, plants, and objects I had never dreamed of.

Which of the following best describes the mood of the author after having this experience?

- A. Bored
  - B. Anxious
  - C. Excited
  - D. Serene
10. Read the passage below and then choose the best answer to the question.

Did you know that a half-gallon milk container holds about \$50 in pennies? While all investment counselors realize that we must accumulate money in order to save, most recommend different kinds of investments for people who are in different stages of life. Older investors, those with limited funds to invest, or people with greater financial and family commitments, should take fewer risks. Younger, wealthier, and unmarried investors can afford to venture into the unknown.

Which of the following best describes the main idea of this passage?

- A. A penny saved is a penny earned.
- B. Our ages and stage of life are part of what determines the investments that are best for us.
- C. Old people have the most money.
- D. Young people should concentrate on collecting pennies.

11. Read the passage below and then choose the best answer to the question. Answer the question on the basis of what is stated or implied in this passage.

Experienced truck drivers often travel in a convoy, a group of trucks that are traveling to the same part of the country. Convoys can help truckers to stay alert.

The author implies that professional long-distance truck drivers may avoid traveling alone because

- A. they might drive too fast
- B. they want to arrive before anyone else.
- C. accidents happen more frequently to lone truck drivers than to car drivers who travel alone.
- D. long-distance travel can cause drowsiness.

12. Read the passage below and choose then choose the best answer to the question.

Huge beasts such as the dinosaur have never really become extinct. Mothra, a giant caterpillar who later becomes a moth, destroys Tokyo, and stars in the 1962 Japanese film named for him. Mothra is born, dies, and reborn regularly on classic movie channels. In Japan *Mothra* is one of the most popular films ever made. Mothra has survived the creation of more current scary creatures such as giant apes, extraterrestrial beings, and swamp creatures. More than 30 years after his creation, Mothra still lives.

The main subject of the passage is

- A. the reasons that fads do not endure.
- B. the lasting appeal of Mothra.
- C. the difficulty of marketing good horror movies.
- D. old models for creatures are still used because making new monsters is expensive.

13. Read the sentences below and then choose the best answer to the question or the best completion of the statement.

Anxious to ensure that America would depart from European traditions regarding religion and royalty, the early U.S. could be described as a place that focused more on work than on the entertainment offered by spectacle and ceremony in the Old World.

However, national celebrations such as the lighting of the White House Christmas Tree and the ceremonies used to swear in new federal officials give the American people some experiences that are based upon national tradition.

What does the second sentence do?

- A. It cancels the meaning of the first sentence
- B. It provides an example of the first sentence.
- C. It adds more detail to the first sentence.
- D. It offers an exception to the information given in the first sentence.

14. Read the passage below and choose then choose the best answer to the question.

The Earth's past climate, including temperature and elements in the atmosphere, has recently been studied by analyzing ice samples from Greenland and Antarctica. The air bubbles in the ice have shown that, over the past 160,000 years, there has been a close correlation between temperature changes and level of natural greenhouse gases carbon dioxide and methane. One recent analysis from Greenland showed that at the end of the last glacial period (when the great ice sheets began to retreat to their present position), temperatures in southern Greenland rose from 5 to 7 degrees in about 100 years. Air bubbles are not the only method of determining characteristics of the Earth's ancient climate history. Analysis of dust layers from ancient volcanic activity is another such method as is the study of ice cores, which interpret past solar activity that may have affected our climate.

This passage states that

- A. the Greenhouse effect is destroying the planet's atmosphere.
  - B. temperatures in Greenland have been unusually stable over the past 100 years.
  - C. there is more than one kind of information that scientists can use to determine the characteristics of the Earth's early climate.
  - D. solar energy is the wave of the future.
15. Two passages are followed by a question or statement. Read the passage below, then choose the best answer to the question or the best completion of the statement.

Before video cameras were widely used, home and business owners had to rely only on written reports and photos as a way to document their valuables for insurance purposes. This form of documentation was difficult for some insurance policy holders. They found it was easy to lose lists or to forget to add new items they purchased or delete items they no longer had. As a result these insurance inventories were often inaccurate.

While video taping is not an option for every home or business owner, this kind of insurance documentation is helpful for some.

How are these passages related?

- A. They repeat the same idea.
  - B. They contradict one another.
  - C. They compare two forms of written documentation.
  - D. They present a problem and a solution.
16. Read the sentences, and then choose the best answer to the question or the best completion of the statement.

Public speaking is very different from everyday conversation.

First of all, speeches are much more structured than a typical informal discussion.

How are these sentences related?

- A. Sentence two offers support for the statement made in the first sentence.
- B. Sentence two contradicts the statement made in the first sentence.
- C. Sentence two shows an exception to the first sentence
- D. Sentence two compares two kinds of speeches.

17. Answer the question on the basis of what is stated or implied in this passage.

French physicist Charles Fabry found ozone gas in the atmosphere in 1913. At room temperature, ozone is a colorless gas; it condenses to a dark blue liquid at  $-170^{\circ}$  F. At temperatures above the boiling point of water,  $212^{\circ}$  F, it decomposes. Ozone is all around us. After a thunderstorm, or around electrical equipment, ozone is often detected as a sharp odor. Ozone is used as a strong oxidizing agent, a bleaching agent, and to sterilize drinking water. This gas is also highly reactive. For example, rubber insulation around a car's spark plug wires will need to be replaced eventually, due to the small amounts of ozone produced when electricity flows from the engine to the plug.

These passages imply that

- A. ozone is the result of pollution.
- B. high ozone levels in the atmosphere will cause large numbers of people to buy new car batteries.
- C. ozone has no practical uses.
- D. ozone is a natural part of the Earth's atmosphere.

18. Read the passages below and then choose the best answer to the question.

Answer the question on the basis of what is stated or implied in this passage.

Many people who have come close to death from drowning, cardiac arrest, or other causes have described near-death experiences: profound subjective events that sometimes result in dramatic changes in values, beliefs, behavior, and attitudes toward life and death. These experiences often include a new clarity of thinking, a feeling of well being, a sense of being out of the body, and visions of bright light or mystical encounters. Such experiences have been reported by an estimated 30 to 40 percent of hospital patients who were revived after coming close to death and about 5 percent of adult Americans in a nationwide poll. Near-death experiences have been explained as a response to a perceived threat of death (a psychological theory); as a result of biological states that accompany the process of dying (a physiological theory); and as a foretaste of an actual state of bliss after death (a transcendental theory).

The primary purpose of this passage is to

- A. entertain
- B. persuade
- C. inform
- D. express disbelief in the afterlife

19. Read the passage below and choose then choose the best answer to the question. Answer the question on the basis of what is stated or implied in these passages.

In most cases little birds lay little eggs. The kiwi is an astonishing exception to this rule. It is a smallish bird that lays a big egg. The kiwi, a flightless bird found in New Zealand, weighs about four pounds, and its egg weighs, believe it or not, about one pound. That is one-fourth of the bird's body weight! If an ostrich laid an egg that was in the same proportion to the ostrich as the kiwi egg is to the kiwi, an ostrich egg would weigh a whopping seventy-five pounds instead of the usual three pounds.

Which statement below best describes the organizational method used in this passage?

- A. description
- B. comparison /contrast
- C. chronological
- D. cause/effect

20. Read the passages below, and then choose the best answer to the question. Answer the question on the basis of what is stated or implied in these passages.

The rise in personal debt in recent years is due largely to aggressive and unwarranted hustling by credit-card companies. Between 1990 and 1996, credit card debt doubled. Today it is still rising.

Credit cards with interest rates reaching nearly 20 percent are a remarkably lucrative part of the loan business. Debtors pay an average of \$1,000 a year in interest and fees alone, money that could instead have been used for a college or retirement fund. Using subtle tactics to tempt unwary consumers to borrow, credit-card companies have led consumers to hold more cards and to fork over a bigger and bigger fraction of their income to the companies.

Which statement best reflects the organization used in this passage?

- A. cause/effect
- B. comparison/contrast
- C. description
- D. explanation

## ANSWERS TO READING PRACTICE EXAM

Review the questions you missed in the Reading Strategies sections indicated in parentheses following the correct answer.

1. <b>D</b> (Cause/Effect)	11. <b>D</b> (Main Idea)
2. <b>B</b> (Comparison/Contrast)	12. <b>B</b> (Main Idea)
3. <b>D</b> (Implied and Stated Ideas)	13. <b>D</b> (Exception)
4. <b>C</b> (Comp./Cont.)	14. <b>C</b> (Main Idea)
5. <b>B</b> (Supporting Details)	15. <b>D</b> (Cause/Effect)
6. <b>C</b> (Main Idea)	16. <b>A</b> (Supporting Details)
7. <b>C</b> (Supporting Details)	17. <b>D</b> (Main Idea)
8. <b>A</b> (Main Idea)	18. <b>C</b> (Main Idea)
9. <b>C</b> (Tone)	19. <b>B</b> (Comp./Cont.)
10. <b>B</b> (Main Idea)	20. <b>A</b> (Cause/Effect)

# ARITHMETIC PRACTICE EXAM

1) Simplify:  $5(-8 + 2) + 3$   
a) 33      b) -27      c) 27      d) 47

2)  $\frac{1}{2} + \frac{3}{5}$   
a)  $1\frac{1}{10}$       b)  $\frac{4}{7}$       c)  $\frac{9}{10}$       d) 2

3)  $3\frac{1}{8} - 2\frac{2}{3} =$   
a)  $1\frac{1}{3}$       b)  $\frac{7}{12}$       c)  $\frac{11}{24}$       d)  $\frac{5}{12}$

4)  $2\frac{2}{3} \times 1\frac{1}{7} =$   
a)  $3\frac{17}{21}$       b)  $3\frac{16}{21}$       c)  $2\frac{17}{21}$       d)  $3\frac{1}{21}$

5)  $\frac{3}{8} \div \frac{1}{4} =$   
a) 8      b)  $1\frac{1}{2}$       c) 9      d)  $\frac{1}{9}$

6)  $2\frac{7}{9} =$   
a)  $\frac{25}{7}$       b)  $\frac{14}{9}$       c)  $\frac{9}{7}$       d)  $\frac{25}{9}$

7)  $0.1 + 0.04 + 2.068 =$   
a) 2.28      b) 2.073      c) 2.083      d) 2.208

8)  $0.03162 \div 0.051 =$   
a) 0.26      b) 0.062      c) 0.62      d) 0.026

9)  $0.049 =$   
a) 4.9%      b) 49%      c) 0.49%      d) 0.049%

10)  $37\frac{1}{2}\% =$   
a)  $\frac{3}{7}$       b)  $\frac{37}{100}$       c)  $\frac{3}{8}$       d)  $\frac{2}{5}$

11)  $4.031 - 1.6972 =$

- a) 2.34      b) 3.3338      c) 2.3338      d) 1.3338

12)  $\frac{3}{20} =$

- a) 1.5%      b) 0.15%      c) 150%      d) 15%

13) 48 is approximately what percent of 95?

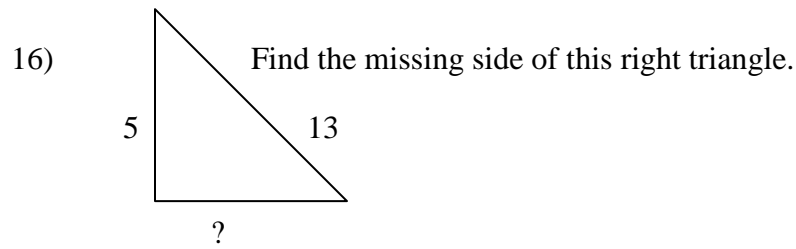
- a) 50%      b) 60%      c) 55%      d) 10%

14) 144 miles on 16 gallons of gas is equal to

- a) 20 miles/gallon      b) 12 miles/gallon      c) 9 miles/gallon      d) 8 miles/gallon

15) Find the area of a rectangular garden 6 meters long and 4 meters wide.

- a)  $18 \text{ m}^2$       b)  $22 \text{ m}^2$       c)  $24 \text{ m}^2$       d)  $20 \text{ m}^2$



- a) 12      b) 8      c) 9      d) 18

17) Find the circumference of a circle with a diameter of 4 inches. (use  $\pi = 3.14$ )

- a) 6.28 inches      b) 14.28 inches      c) 13.62 inches      d) 12.56 inches

18) If 3 people share \$27,000 unequally in the form of  $\frac{1}{3}$ ,  $\frac{5}{12}$ , and  $\frac{1}{4}$  how much will each person get ?

- |          |        |       |
|----------|--------|-------|
| a) 9,000 | 9,000  | 9,000 |
| b) 9,000 | 11,250 | 6,750 |
| c) 9,000 | 16,750 | 1,250 |
| d) 9,000 | 12,000 | 6,000 |

19) 20 is what percent of 150?

- a) 10%      b) 20%      c)  $13 \frac{1}{3} \%$       d) 11%

20) 8 is  $16\frac{2}{3}\%$  of what number?

a) 48

b) 40

c) 52

d) 60

### ANSWERS TO ARITHMETIC PRACTICE EXAM

1. b	11. c
2. a	12. d
3. c	13. a
4. d	14. c
5. b	15. c
6. d	16. a
7. d	17. d
8. c	18. b
9. a	19. c
10. c	20. a

## ALGEBRA PRACTICE EXAM

The following practice questions are meant to be a review of basic algebraic operations and concepts. After completing this review, if you feel you need additional practice or review, please stop in or contact the Student Success Center at: (740) 695-9500, Ext. 1080 for additional resources.

1) Simplify:  $\frac{x^2+2x+1}{x^2-1}$

a)  $x - 1$     b)  $\frac{x-1}{x+1}$     c)  $\frac{1}{x+1}$     d)  $\frac{x+1}{x-1}$

2) Factor:  $3x^2 + 10x + 8$

a)  $(3x + 1)(x + 8)$     b)  $(3x+2)(x + 4)$     c)  $(3x + 8)(x + 1)$     d)  $(3x + 4)(x + 2)$

3)  $5(-8-2) + 3 =$

a) -27    b) 53    c) -47    d) -53

4) If  $x = 5$ , then  $-4x^2 + 6x - 3 =$

a) 427    b) -67    c) -88    d) -73

5) Which of the following is largest?

- a)  $(-3)(-2)$     b)  $-2$     c)  $4$     d)  $-6/5$

6)  $(4x + 3y) - (7x - 6y) =$

- a)  $3x + 9y$     b)  $11x + 9y$     c)  $-3x + 9y$     d)  $-3x + 3y$

7)  $8 + 5z - w - 8z - w =$

- a)  $8 + 13z$     b)  $8 - 3z - 2w$     c)  $8 - 3z$     d)  $8 + 13z - 2w$

8)  $(-5x^6y)(7x^4y^5) =$

- a)  $-35x^{10}y^6$     b)  $35x^{10}y^6$     c)  $2x^{10}y^6$     d)  $-35x^{24}y^5$

9)  $(x - 3)^2 =$

- a)  $x^2 + 9$     b)  $x^2 - 3x + 9$     c)  $x^2 - 6x + 9$     d)  $x^2 - 6x - 9$

10)  $\frac{(n+3)}{(n^2+3n)} =$

a)  $\frac{1}{n}$

b)  $\frac{3}{(n+5)}$

c)  $\frac{1}{(n+1)}$

d)  $\frac{1}{n^2}$

11) Evaluate:  $\left(\frac{2}{5}\right)^{-3}$

a)  $\frac{-8}{125}$

b)  $\frac{-125}{8}$

c)  $\frac{125}{8}$

d)  $\frac{-6}{125}$

12) Simplify:  $(-2)^5(-2)^3 =$

a)  $(4)^8$

b)  $(-2)^8$

c)  $(-2)^{15}$

d)  $(4)^{15}$

13) Simplify:  $\sqrt{16x^4}$

a)  $4x^2$

b)  $8x^4$

c)  $8x^2$

d)  $4x$

14) Simplify:  $\sqrt{200} =$

a)  $2\sqrt{50}$

b)  $5\sqrt{8}$

c)  $10\sqrt{2}$

d)  $20$

15) Solve:  $x^2 - 10x + 9$   
a)  $x = -1$  ,  $x = -9$     b)  $x = 1, x = 9$     c)  $x = 9, x = 0$     d)  $x = -3, x = 3$

16) Solve:  $12x - 7x - 4x + 9 = 19$   
a)  $x = 28$     b)  $x = 10$     c)  $x = -10$     d)  $x = 5$

17) Solve:  $-7b + 4(2b - 3) = 16$   
a)  $b = 28$     b)  $b = 4$     c)  $b = -28$     d)  $b = -4$

18) The perimeter of a rectangle is 48 cm. The width is 8 cm longer than the length. What is the length?  
a) 4 cm    b) 16 cm    c) 12 cm    d) 8 cm

19) Solve:  $0.2y < 0.8$   
a)  $y < 0.4$     b)  $y < 0.04$     c)  $y < 4$     d)  $y < 0.6$

20) Solve:  $\frac{1}{x} + \frac{1}{2} = 5$

a)  $x = \frac{9}{2}$

b)  $x = 5$

c)  $x = \frac{2}{9}$

d)  $x = -5$

### ANSWERS TO ALGEBRA PRACTICE EXAM

1. d	11. c
2. d	12. b
3. c	13. a
4. d	14. c
5. a	15. b
6. c	16. b
7. b	17. a
8. a	18. d
9. c	19. c
10. a	20. c

# **BELMONT TECHNICAL COLLEGE**

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A stylized sunburst graphic consisting of a central white circle with several thick black rays extending outwards. The rays are arranged in a semi-circle, with two rays on each side of the center. The rays are composed of two parallel black lines, creating a sense of depth and movement.

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