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Placement Examination Study Guide



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COMPASS[®]/ESL

Sample Test Questions— A Guide for Students and Parents Reading



An ACT Program for Educational Planning

Note to Students

Welcome to the COMPASS Sample Reading Test!

You are about to look at some sample test questions as you prepare to take the actual COMPASS test. The examples in this booklet are similar to the kinds of test questions you are likely to see when you take the actual COMPASS test. Since this is a practice exercise, you will answer just a few questions and you won't receive a real test score. The answer key follows the sample questions.

Once you are ready to take the actual COMPASS test, you need to know that the test is computer delivered and *untimed*—that is, you may work at your own pace. After you complete the test, you can get a score report to help you make good choices when you register for college classes.

We hope you benefit from these sample questions, and we wish you success as you pursue your education and career goals!

Note to Parents

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COMPASS/ESL Reading Placement Test

The reading comprehension items are of two general categories: referring and reasoning. Within each of these two general categories are several content categories that further specify the skills and knowledge assessed by each item. Referring items pose questions about material explicitly stated in a passage. Reasoning items assess proficiency at making appropriate inferences, developing a critical understanding of the text, and determining the specific meanings of difficult, unfamiliar, or ambiguous words based on the surrounding context.

Samples of items in the primary content categories of the COMPASS Reading Placement Test are provided on the following pages.

Sample Passage 1

What Methods Do Andean Farmers Use?

Public debate around climate change and its effects on agriculture tends to focus on the large-scale industrial farms of the North. Farmers who work on a small scale and use traditional methods have largely been ignored. However, as the world slowly comes to terms with the threat of climate change, Native farming traditions will warrant greater attention.

In the industrial model of agriculture, one or two crop varieties are grown over vast areas. Instead of trying to use local resources of soil and water optimally and sustainably, the natural environment is all but ignored and uniform growing conditions are fabricated through large-scale irrigation and the intensive use of artificial fertilizers and pesticides. For example, a handful of basically similar potato varieties, all of which require nearly identical soil conditions, temperature, rainfall, and growing seasons, account for almost all global production. When these global crops are no longer suited to the environment in which they are grown, when their resistance to disease and pests begins to fail, or the climate itself changes, the best way to rejuvenate the breeding stock will be to introduce new genetic material from the vast diversity of crop varieties still maintained by indigenous peoples.

In contrast to the industrial model, Andean potatoes and other Andean crops such as squash and beans grown by Quechuan farmers exhibit extraordinary genetic diversity, driven by the need to adapt crops to the extraordinary climatic diversity of the region. Along the two axes of latitude and altitude, the Andes encompasses fully two-thirds of all possible combinations of climate and geography found on Earth. The Andean potato has been adapted to every environment except the depth of the rainforest or the frozen peaks of the mountains. Today, facing the likelihood of major disruptions to the climatic conditions for agriculture worldwide, indigenous farmers provide a dramatic example of crop adaptation in an increasingly extreme environment. More importantly, Native farmers have also safeguarded the crop diversity essential for the future adaptations.

Adapted from Craig Benjamin, "The Machu Picchu Model: Climate Change and Agricultural Diversity."
© 1999 by Craig Benjamin.

1. What is the main idea of the first paragraph?
 - A. Attention to Native farming practices will lead to greater awareness of the threat of climate change.
 - B. Popularity of small-scale farming in the North will lead to greater attention to Native farming practices.
 - C. Global demand for food will lead to increasing efficiency of large-scale farming in the North.
 - D. It will be worthwhile to include a greater focus on Native farming practices in public discussions concerning the threat of climate change.
 - E. Despite potential climate change, public debate will have little effect on industrial farming practices.
2. In the second paragraph, the information about potato-growing practices in the industrial model of agriculture serves to:
 - A. give an example of a potential problem that Native farming practices could help to alleviate.
 - B. show the likely global consequences of a possible food shortage caused by industrial farming practices.
 - C. show how pests and disease are less effectively resisted by crops grown in the industrial farming model.
 - D. give an example of how public debate has had little effect on the agricultural practices of the North.
 - E. give an example of how Native farming practices and industrial farming practices derive from different climatic conditions.
3. The passage states that which of the following is true of the small number of potato varieties that account for most of the potatoes produced on Earth currently?
 - A. They are grown in the Andean region.
 - B. They all require very similar soil and climate conditions.
 - C. They are no longer suited to their environment.
 - D. They are based on genetic material from crops developed by indigenous peoples.
 - E. They make optimal use of available soil and water resources.
4. As it is used in the passage, the underlined word *fabricated* most nearly means:
 - A. woven.
 - B. falsely stated.
 - C. fully clothed.
 - D. manufactured.
 - E. unwrapped.

Sample Passage 2

Fortune Tellers

A young couple entered the restaurant in Andy's view. They were holding hands. Andy sat back down in his chair. He felt sick. He turned and faced his father, who was eating *xôi*.

"What's the matter, son?" asked his father. "I thought you were going to the birthday party."

"It's too late."

"Are you sure?"

Andy nodded. He looked at the plate of *xôi*. He wanted to bury his face in it.

"Hi, Andy." A voice came from behind.

Andy looked up. He recognized the beautiful face, and he refused to meet her eyes. "Hi, Jennifer," muttered Andy, looking at the floor.

"You didn't miss much, Andy. The party was dead. I was looking for you, hoping you could give me a ride home. Then I met Tim, and he was bored like me. And he said he'd take me home.... Andy, do you want to eat with us? I'll introduce you to Tim."

Andy said, "No, I'm eating *xôi* with my father."

"Well, I'll see you in school then, okay?"

"Yeah." And Andy watched her socks move away from his view.

Andy grabbed a chunk of *xôi*. The rice and beans stuck to his fingernails. He placed the chunk in his mouth and pulled it away from his fingers with his teeth. There was a dry bitter taste. But nothing could be as bitter as he was, so he chewed some more. The bitterness faded as the *xôi* became softer in his mouth, but it was still tasteless. He could hear the young couple talk and giggle. Their words and laughter and the sounds of his own chewing mixed into a sticky mess. The words were bitter and the laughter was tasteless, and once he began to understand this, he tasted the sweetness of *xôi*. Andy enjoyed swallowing the sticky mess down. Andy swallowed everything down—sweetness and bitterness and nothingness and what he thought was love.

Adapted from Nguyen Duc Minh, "Fortune Tellers." in the collection *American Eyes*. ©1994 by H. Holt

1. Who is telling this story?
 - A. Jennifer
 - B. Andy
 - C. Tim
 - D. Andy's father
 - E. An unnamed narrator

2. What is the most reasonable conclusion to make from the statement in the first paragraph, "He felt sick."?
 - A. Eating xoi with his father gave Andy a stomachache.
 - B. Andy was upset when he saw Jennifer holding hands with Tim.
 - C. Andy was unhappy about the restaurant his father had selected.
 - D. Andy was upset with Jennifer for making him miss the party.
 - E. Andy mistakenly thought that Tim was his best friend.

3. According to the passage, Tim would most likely describe the party as:
 - A. mysterious.
 - B. lively.
 - C. dull.
 - D. upsetting.
 - E. remarkable.

4. Based on the last paragraph, it can be most reasonably inferred that Andy's increasing enjoyment of eating xôi was related to:
 - A. hearing Tim and Jennifer laughing and talking.
 - B. the fact that it stuck to his fingernails.
 - C. sitting at a table with Tim and Jennifer while he ate.
 - D. the fact that his father made the xôi.
 - E. seeing Tim and Jennifer eating xôi.

5. This passage is mainly about the relationship between:
 - A. Andy and his father.
 - B. Andy and Tim.
 - C. Andy's father and Tim.
 - D. Jennifer and Tim.
 - E. Jennifer and Andy.

Sample Passage 3

In the 1930s, why did author Zora Neale Hurston choose Eatonville, Florida, to be the first source for her collection of folklore?

I was glad when somebody told me, “You may go and collect Negro folklore.” In a way, it would not be a new experience for me. When I pitched headforemost into the world I landed in the crib of Negroism. It was fitting me like a tight chemise. I couldn't see it for wearing it. It was only when I was off in college, away from my native surroundings, that I could stand off and look at my garment. Then I had to have the spy-glass of anthropology to look through.

I was asked where I wanted to work and I said, “Florida. It’s a place that draws people—Negroes from every Southern state and some from the North and West.” So I knew that it was possible for me to get a cross section of the Negro South in one state. And then I realized that I felt new myself, so it looked sensible for me to choose familiar ground.

I started in Eatonville, Florida, because I knew that the town was full of *material* and that I could get it without causing any hurt or harm. As early as I could remember, it was the habit of the men particularly to gather on the store porch in the evenings and swap stories. Even the women would stop and break a breath with them at times. As a child when I was sent down to the store, I'd drag out my leaving to hear more.

Folklore is not as easy to collect as it sounds. The ideal source is where there are the fewest outside influences, but these people are reluctant at times to reveal that which the soul lives by. I knew that even *I* would have some hindrance among strangers. But here in Eatonville I knew everybody was going to help me.

Adapted from Zora Neale Hurston, *Mules and Men*. ©1935 by J.B. Lippincott Company.

1. Which of the following does the author use as a metaphor for the culture in which she was born?
 - A. College
 - B. Garment
 - C. Southern state
 - D. Spy-glass
 - E. Story
2. Based on the first paragraph, it is most reasonable to conclude that while in college the author:
 - A. decided to become a professor of anthropology.
 - B. decided that she did not want to live permanently in Eatonville, Florida.
 - C. felt that her teachers prevented her from studying what she wanted.
 - D. became disenchanted with anthropology.
 - E. understood her own culture in new and different ways.

3. As it is used in the passage, the highlighted word *material* most nearly means:
- A. diversity.
 - B. fabric.
 - C. information.
 - D. money.
 - E. energy.
4. In the second paragraph, the author indicates that one reason she chose to work in Florida was that she wanted to collect folklore:
- A. from people of different geographical backgrounds.
 - B. where her teachers suggested she do so.
 - C. from a place she had never visited.
 - D. in a state far from where she grew up.
 - E. in a state with a large urban population.
5. In the first paragraph, the author's claim, "In a way, it would not be a new experience for me," refers to the fact that:
- A. she had already attended college in Florida.
 - B. she had already collected folklore in Florida for a college course.
 - C. she had already experienced new cultures by leaving home.
 - D. she was already familiar with the folklore she was to collect.
 - E. she had already received permission to conduct the study.
6. Based on information in the third paragraph, which of the following statements about the interactions on the porch can be most reasonably inferred?
- A. The adults encouraged the author (as a child) to stay and tell stories.
 - B. Men were more frequent participants than were women.
 - C. Most of the storytellers had not grown up in Eatonville.
 - D. The author's parents sent her to the porch to hear the stories.
 - E. One man in particular told most of the stories.
7. In the last paragraph, the author writes that folklore collecting:
- A. is less difficult than it appears.
 - B. is easiest to accomplish in isolated places because people there freely reveal their innermost thoughts.
 - C. can be difficult in isolated places, even though the people there are the best sources.
 - D. is more difficult than publishing what has been collected.
 - E. is the best way to reveal what is important to people.
8. Which of the following is NOT among the reasons the author gives for her decision to collect folklore in Eatonville?
- A. The people of Eatonville would be grateful that she published their stories.
 - B. The people of Eatonville would have many stories for her collection.
 - C. Eatonville and its people are familiar to her.
 - D. She believes that she can collect stories without doing harm.
 - E. She believes that the people of Eatonville will help her in her project.

Correct Answers for Sample Reading Items

Sample Passage 1 Andean Farming Natural Science

Question #	Correct Answer	Content Category
1	D	Recognizing the main idea of a paragraph
2	A	Showing how details are related to the main idea
3	B	Recognizing significant details
4	D	Vocabulary

Sample Passage 2 Fortune Tellers Fiction

Question #	Correct Answer	Content Category
1	E	Recognizing several points of view
2	B	Drawing conclusions from facts given
3	C	Recognizing significant details
4	A	Inferring cause-effect relationships
5	E	Inferring the main idea of a passage with more than one paragraph

Sample Passage 3 Zora Hurston Humanities

Question #	Correct Answer	Content Category
1	B	Recognizing significant details
2	E	Drawing conclusions from facts given
3	C	Vocabulary
4	A	Drawing conclusions from facts given
5	D	Drawing conclusions from facts given
6	B	Drawing conclusions from facts given
7	C	Recognizing significant details
8	A	Recognizing significant details

COMPASS[®]/ESL

Sample Test Questions— A Guide for Students and Parents Writing Skills



An ACT Program for Educational Planning

Note to Students

Welcome to the COMPASS Sample Writing Skills Test!

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COMPASS Writing Skills Sample Test Questions

The Writing Skills Placement Test presents one or more passages, each containing several errors. When an error is detected in a passage, clicking on that section of the passage brings up several alternative segments of text from which a more appropriate segment can be selected and inserted automatically into the text. Items in the Writing Skills Placement Test assess basic knowledge and skills in usage and mechanics (e.g., punctuation, basic grammar and usage, and sentence structure) as well as more rhetorical skills such as writing strategy, organization, and style. Representative samples of items from these knowledge and skill areas are provided in the following pages.

Note that in the sample passages that follow, each section is numbered. In the computerized COMPASS Writing Skills Placement Test, sections are not numbered; instead, errors are identified by moving the cursor to the section of text in which an error is identified and then clicking the left mouse button to make the alternative text options appear.

Sample Passage #1

Grameen Bank

Bangladesh's economy is based primarily on small-scale enterprises ran by self-employed men and women. These small-business owners, who make a living as shopkeepers or providers of services, face a problem common to proprietors everywhere: lack of access to credit, particularly among the early start-up phase of an enterprise. Credit, which allows people to obtain the resources and equipment he needs to make his business productive, is often, frequently unavailable to those who possess little collateral. Thus, many people which would benefit from credit are denied access to it.

The Grameen Bank, founded in 1976 by economist Muhammad Yunis, who was a fine soccer player in his youth, provides the only unique alternative via loans to prospective business owners, whether they are given only to those who fall below a certain level of assets. Instead of putting up collateral, Grameen customers are accountable with one another, congregating in small groups that meet as a week. If one member will fail to repay a loan, the entire group is unable to obtain credit in the future thus, group members have a strong incentive to succeed and support others in the group. In the last twenty years, the Grameen Bank has lent two billion dollars, and his customers have repaid 97 percent of their loans. Such results have led to the creation of similar programs.

Item 1.

- A. Bangladesh's economy is based primarily on small-scale
- B. Bangladesh's economy's is based primarily on small-scale
- C. Bangladesh's economies' are based primarily on small-scale
- D. Bangladesh's economys' is based primarily on small-scale
- E. Bangladesh's economies' is based primarily on small-scale

Item 2.

- A. enterprises ran by self-employed men and women.
- B. enterprises run by self-employed men and women.
- C. enterprises have run by self-employed men and women.
- D. enterprises was run by self-employed men and women.
- E. enterprises had been run by self-employed men and women.

Item 3.

- A. These small-business owners, who make a living as shopkeepers or providers of services,
- B. These small-business owners, who make a living, as shopkeepers or providers of services
- C. These small-business owners, who make a living as shopkeepers, or providers of services
- D. These small-business owners who make a living as shopkeepers or providers of services,
- E. These small-business owners; who make a living as shopkeepers or providers of services,

Item 4.

- A. face a problem common to proprietors everywhere: lack of access to credit,
- B. face a problem common to proprietors everywhere: lack of access credit,
- C. face a problem common to proprietors everywhere: lack of access from credit,
- D. face a problem common to proprietors everywhere: lack of access in credit,
- E. face a problem common to proprietors everywhere: lack of access for credit,

Item 5.

- A. particularly among the early start-up phase of an enterprise.
- B. particularly between the early start-up phase of an enterprise.
- C. particularly below the early start-up phase of an enterprise.
- D. particularly during the early start-up phase of an enterprise.
- E. particularly now the early start-up phase of an enterprise.

Item 6.

- A. Credit, which allows people to obtain the resources and equipment he needs to make his business productive,
- B. Credit, which allows people to obtain the resources and equipment they need to make their businesses productive,
- C. Credit, which allows people to obtain the resources and equipment we need to make our business productive,
- D. Credit, which allows people to obtain the resources and equipment one needs to make our business productive,
- E. Credit, which allows people to obtain the resources and equipment you need to make one's business productive,

Item 7.

- A. is often, frequently unavailable to those who possess little collateral.
- B. is often unavailable many times to those who possess little collateral.
- C. is often unavailable to those who possess little collateral.
- D. is often unavailable frequently to those who possess little collateral.
- E. is often unavailable, all the time, to those who possess little collateral.

Item 8.

- A. Thus, many
- B. Although, many
- C. Nevertheless, many
- D. Since, many
- E. Anyway, many

Item 9.

- A. people which would benefit from credit
- B. people whom would benefit from credit
- C. people whose would benefit from credit
- D. people who's would benefit from credit
- E. people who would benefit from credit

Item 10.

- A. are denied access to it.
- B. are denying access to it.
- C. deny access to it.
- D. denied access to it.
- E. there is access denied to it.

Item 11.

- A. The Grameen Bank, founded in 1976 by economist Muhammad Yunis, who was a fine soccer player in his youth, provides
- B. The Grameen Bank, founded in 1976 by economist Muhammad Yunis, who visited the University of Michigan, provides
- C. The Grameen Bank, founded in 1976 by economist Muhammad Yunis, who studied economics at a highly regarded university, provides
- D. The Grameen Bank, founded in 1976 by economist Muhammad Yunis, who is married and has three children, provides
- E. The Grameen Bank, founded in 1976 by economist Muhammad Yunis, who returned to Bangladesh in 1972, provides

Item 12.

- A. the only unique alternative
- B. the sole unique alternative
- C. the lone unique alternative
- D. a unique alternative
- E. the exclusive unique alternative

Item 13.

- A. via loans to prospective business owners, whether they are given only to those who fall below a certain level of assets.
- B. via loans to prospective business owners, which are given only to those who fall below a certain level of assets.
- C. via loans to prospective business owners are given only to those who fall below a certain level of assets.
- D. via loans to prospective business owners. Which are given only to those who fall below a certain level of assets.
- E. via loans to prospective business owners, when given only to those who fall below a certain level of assets.

Item 14.

- A. Instead of putting up collateral, Grameen customers are accountable with one another,
- B. Instead of putting up collateral, Grameen customers are accountable in one another,
- C. Instead of putting up collateral, Grameen customers are accountable one another,
- D. Instead of putting up collateral, Grameen customers are accountable at one another,
- E. Instead of putting up collateral, Grameen customers are accountable to one another,

Item 15.

- A. congregating in
- B. and congregation in
- C. congregate in
- D. so congregating in
- E. congregating between

Item 16.

- A. small groups that meet as a week.
- B. small groups that meet every weekly.
- C. small weekly groups that meet.
- D. small groups that meet weekly.
- E. small groups weekly each meet.

Item 17.

- A. If one member will fail to repay a loan, the entire group is unable to obtain credit
- B. If one member fails to repay a loan, the entire group is unable to obtain credit
- C. If one member do fail to repay a loan, the entire group is unable to obtain credit
- D. If one member is fail to repay a loan, the entire group is unable to obtain credit
- E. If one member failing to repay a loan, the entire group is unable to obtain credit

Item 18.

- A. in the future thus, group members have a strong incentive to succeed and support
- B. in the future and thus, group members have a strong incentive to succeed and support
- C. in the future, thus, group members have a strong incentive to succeed and support
- D. in the future, and, thus, group members have a strong incentive to succeed and support
- E. in the future; thus, group members have a strong incentive to succeed and support

Item 19.

- A. others in the group. In the last twenty years, the Grameen Bank has lent two billion dollars,
- B. others in the group. In the last twenty years, the Grameen Bank has lended two billion dollars,
- C. others in the group. In the last twenty years, the Grameen Bank lend two billion dollars,
- D. others in the group. In the last twenty years, the Grameen Bank did lent two billion dollars,
- E. others in the group. In the last twenty years, the Grameen Bank lends two billion dollars,

Item 20.

- A. and his customers have repaid 97 percent of their loans.
- B. and their customers have repaid 97 percent of their loans.
- C. and its customers have repaid 97 percent of their loans.
- D. and itself's customers have repaid 97 percent of their loans.
- E. and our customers have repaid 97 percent of their loans.

Item 21.

- A. Such results have led to the creation of similar programs.
- B. Such results: have led to the creation of similar programs.
- C. Such results have led, to the creation of similar programs.
- D. Such results, have led to the creation of similar programs.
- E. Such results; have led to the creation of similar programs.

Item 22. Suppose the writer wants to show that lending programs, similar to the one administered by the Grameen Bank, have been widely accepted. Which of the following phrases, if added to the last sentence of the essay, would best achieve that goal?

- A. to make credit available
- B. over the years
- C. around the world
- D. to encourage development
- E. with some variations

Item 23. Suppose the writer had been asked to write an essay explaining the influence of the credit system developed by Muhammad Yunis on the economy of the United States. Does this article fulfill that assignment?

- A. Yes, because the article explains the work of Yunis and his success since 1976.
- B. Yes, because the article says that there are similar credit programs in the United States.
- C. Yes, because the economic influence of the Grameen Bank is felt throughout the world.
- D. No, because the article says that similar credit systems have been established but does not specifically mention the United States.
- E. No, because the article is concerned with the reputation of Yunis as an economist, rather than the credit system he developed.

Item 24. Which of the following sentences, if added at the end of the first paragraph, would best make the point that there was a need for the Grameen Bank?

- A. This led to a stagnant economy in Bangladesh.
- B. Other people, however, are able to overcome a lack of credit.
- C. Collateral, therefore, is essential for a healthy economy.
- D. Of course, there are some start-up businesses that do not need loans at all.
- E. The banks, however, are able to lend their money in other countries.

Sample Passage #2

Léopold Sédar Senghor

Léopold Sédar Senghor, the Senegalese poet and statesman, leading a life of mythic proportions. Born in a small West African village in 1906, Senghor had directed a movement
against French colonial rule that brought Senegal independence in 1959. Senghor served as
Senegal's first elected president from 1960 to 1980. Because of Senghor's political influence,
therefore, Senegal is today one of Africa's most stable and affluent nations.
After World War II, Senghor has entered politics and held a number of elected positions in
France and Senegal between 1946 and 1959. During this time, working ceaselessly in African
independence movements, all the while it emphasizes the importance of African culture identity.
Senghor's efforts contributed to Charles de Gaulle's grant of national sovereignty to Senegal
and other West African countries in 1959.
One legend about Senghor claim that at the moment of his birth, a tree on the ground fell
and split, releasing a great spirit that entered the newborn's body. Senghor himself did not
believe this story, true or not, the tale on the other hand gives an appropriately mythic
dimension to the life of a man honored for his courageous and progressively work for the
freedom of African peoples.

Item 1.

- A. Léopold Sédar Senghor, the Senegalese poet and statesman, leading a life of mythic proportions.
- B. Léopold Sédar Senghor, the Senegalese poet and statesman, led a life of mythic proportions.
- C. Léopold Sédar Senghor, the Senegalese poet and statesman, having led a life of mythic proportions.
- D. Léopold Sédar Senghor, the Senegalese poet and statesman, while leading a life of mythic proportions.
- E. Léopold Sédar Senghor, the Senegalese poet and statesman, in order to lead a life of mythic proportions.

Item 2.

- A. Born in a small West African village in 1906,
- B. Born, in a small West African village in 1906,
- C. Born in a small, West African village in 1906,
- D. Born, in a small West African village, in 1906,
- E. Born in a small, West, African village in 1906,

Item 3.

- A. Senghor had directed a movement against French colonial
- B. Senghor directed a movement against French colonial
- C. Senghor directing a movement against French colonial
- D. Senghor to direct a movement against French colonial
- E. Senghor by directing a movement against French colonial

Item 4.

- A. rule that bringed Senegal independence in 1959.
- B. rule that had bringed Senegal independence in 1959.
- C. rule that did bringed Senegal independence in 1959.
- D. rule that would of brought Senegal independence in 1959.
- E. rule that brought Senegal independence in 1959.

Item 5.

- A. Senghor served as Senegal's first elected president from 1960 to 1980.
- B. Senghor served as, and was officially, Senegal's first elected president from 1960 to 1980.
- C. Senghor won the election and served as Senegal's first elected president from 1960 to 1980.
- D. Senghor was voted in and served as Senegal's first elected president from 1960 to 1980.
- E. Senghor campaigned and served as Senegal's first elected president from 1960 to 1980.

Item 6.

- A. Because of Senghor's political influence, therefore, Senegal
- B. Thus, because of Senghor's political influence, therefore, Senegal
- C. Consequently, due to Senghor's political influence, therefore, Senegal
- D. Because of Senghor's political influence, Senegal
- E. On account of Senghor's political influence, therefore, Senegal consequently

Item 7.

- A. is today one of Africa's most stable and affluent nations.
- B. is today one of Africa's most rock steady and rich nations.
- C. is today one of Africa's most stubborn and moneyed nations.
- D. is today one of Africa's most unflappable and loaded nations.
- E. is today one of Africa's most imperturbable and wealth-enhanced nations.

Item 8.

- A. After World War II, Senghor has entered politics
- B. After World War II, Senghor entered politics
- C. After World War II, Senghor having entered politics
- D. After World War II, Senghor was going to enter politics
- E. After World War II, Senghor had been going to enter politics

Item 9.

- A. and held a number of elected positions in France and Senegal between 1946 and 1959.
- B. and held a number of positions in France and Senegal between 1946 and 1959.
- C. and held some important jobs in France and Senegal between 1946 and 1959.
- D. and held a number of different positions in France and Senegal between 1946 and 1959.
- E. and held a number (two or three) of elected positions in France and Senegal between 1946 and 1959.

Item 9.

- A. During this time, working ceaselessly
- B. During this time, having worked ceaselessly
- C. During this time, he, working ceaselessly
- D. During this time, he worked ceaselessly
- E. During this time, to work ceaselessly

Item 11.

- A. in African independence movements, all the while it emphasizes the importance of African cultural identity.
- B. in African independence movements, all the while it emphatic of the importance of African cultural identity.
- C. in African independence movements, all the while had it emphasized the importance of African cultural identity.
- D. in African independence movements, all the while emphasis was placed on the importance of African cultural identity.
- E. in African independence movements, all the while emphasizing the importance of African cultural identity.

Item 12.

- A. Senghor's efforts contributed to Charles de Gaulle's
- B. Senghors efforts contributed to Charles de Gaulle's
- C. Senghors' efforts contributed to Charles de Gaulle's
- D. Senghors efforts' contributed to Charles de Gaulle's
- E. Senghors effort's contributed to Charles de Gaulle's

Item 13.

- A. grant of national sovereignty to Senegal and other West African countries in 1959.
- B. grant of national sovereignty, to Senegal and other West African countries in 1959.
- C. grant, of national sovereignty to Senegal and other West African countries in 1959.
- D. grant of, national sovereignty to Senegal and other West African countries, in 1959.
- E. grant of national sovereignty, to Senegal and other West African countries, in 1959.

Item 14.

- A. One legend about Senghor claim
- B. One legend about Senghor have claimed
- C. One legend about Senghor had claims
- D. One legend about Senghor has claims
- E. One legend about Senghor claims

Item 15.

- A. that at the moment of his birth, a tree on the ground fell and split,
- B. that at the moment of his birth, a tree on the ground split and fell,
- C. that at the moment of his birth, a tree split and fell to the ground,
- D. that at the moment of his birth, the falling ground split a tree,
- E. that a tree at the moment of his birth split the earth and fell to the ground,

Item 16.

- A. releasing a great spirit that entered the newborn's body.
- B. releasing a great spirit that plundered the newborn's body.
- C. releasing a great spirit that violated the newborn's body.
- D. releasing a great spirit that charmed the newborn's body.
- E. releasing a great spirit that invaded the newborn's body.

Item 17.

- A. Senghor himself did not believe this story, true or not,
- B. Senghor himself did not believe this story. True or not,
- C. Senghor himself did not believe this story, true, or not,
- D. Senghor himself did not believe this story true, or not,
- E. Senghor himself did not believe this story true or not,

Item 18.

- A. the tale on the other hand gives an appropriately
- B. the tale consequently gives an appropriately
- C. the tale nevertheless gives an appropriately
- D. the tale otherwise gives an appropriately
- E. the tale objectively gives an appropriately

Item 19.

- A. mythic dimension to the life of a man honored
- B. mythic dimension to the life for a man honored
- C. mythic dimension to the life whom a man honored
- D. mythic dimension to the life by a man honored
- E. mythic dimension to the life with a man honored

Item 20.

- A. for his courageous and progressively work for the freedom of African peoples.
- B. for his courageous and progress work for the freedom of African peoples.
- C. for his courageous and progressed work for the freedom of African peoples.
- D. for his courageous and progression work for the freedom of African peoples.
- E. for his courageous and progressive work for the freedom of African peoples.

Item 21. The writer wants to add a sentence that would introduce the second paragraph's discussion of Senghor's activities prior to becoming president of Senegal. Which of the following sentences would best achieve this effect?

- A. Educated in Dakar and Paris, Senghor began his career as a teacher in France.
- B. Senghor goes on to head Senegal's independent government for twenty years.
- C. Senghor was never a very superstitious man.
- D. Senghor's father was a prosperous merchant in the small village of Joal.
- E. Senghor was the first president of the independent Senegal.

Item 22. If the writer were to eliminate the information in paragraph 3 that Senghor himself did not believe the story about the tree, the essay would primarily lose:

- A. a sense of Senghor's skeptical nature.
- B. insight into African politicians' beliefs.
- C. an illustration of one way a spirit can be released.
- D. a suggestion of the admiration Senghor inspired.
- E. the implication that all African myths involve nature.

Sample Passage #3

Zebra Mussel

An increasing number of lakes and rivers in the northern United States invaded are being
by a species no larger than a fingernail.

The zebra mussel probably steamed aboard a transatlantic ship sometime in the mid-
1980s from the Caspian Sea into U.S. waterways. Despite its growth was explosive, partly
because the species was preyed upon by very few native predators in its new environment.

As a consequence, the zebra mussels did find a plentiful food supply. They eat huge
amounts of phytoplankton, which tiny free-floating sea organisms that dwell in water.

Scientists are concerned when the mussels may compete aggressively with other species
that depend on the same food supply.

Being invasive, the species concerns industry, public utilities, and boat owners.

Zebra mussels cluster in huge colonies, being anchored themselves to any hard surface.

These colonies can clog your water intake pipes of electric and water treatment plants.

Fishery specialists are currently casting about and baiting their hooks to gun down control
methods that will cause the lowest amount of damage to water supplies and other aquatic

species. Two of the alternatives exploring are interrupting the species reproductive cycle
and finding a bacterium harmful only to zebra mussels.

Item 1.

- A. An increasing number of lakes and rivers
- B. An increasingly number of lakes and rivers
- C. A number increasing of lakes and rivers
- D. A number increasingly of lakes and rivers
- E. An increasing of lakes and rivers

Item 2.

- A. in the northern United States invaded are being
- B. in the northern United States invaded have been
- C. in the northern United States are being invaded
- D. in the northern United States are been invaded
- E. in the northern United States being invaded are

Item 3.

- A. by a species no larger than a fingernail.
- B. by a species no larger than, a fingernail.
- C. by a species, no larger than a fingernail.
- D. by a species no larger, than a fingernail.
- E. by a species, no, larger than a fingernail.

Item 4.

- A. The zebra mussel probably steamed aboard a transatlantic ship sometime in the mid-1980s from the Caspian Sea into U.S. waterways.
- B. The zebra mussel probably steamed into U.S. waterways sometime in the mid-1980s aboard a transatlantic ship from the Caspian Sea.
- C. The zebra mussel probably steamed, sometime in the mid-1980s, aboard a transatlantic ship into U.S. waterways from the Caspian Sea.
- D. The zebra mussel probably steamed sometime from the Caspian Sea in the mid-1980s into U.S. waterways aboard a transatlantic ship.
- E. The zebra mussel probably steamed from the Caspian Sea aboard a transatlantic ship sometime in the mid-1980s into U.S. waterways.

Item 5.

- A. Despite its growth was explosive, partly because the species
- B. Growth of it, explosive, partly because the species
- C. It's growth was explosive and partly because the species
- D. Where its explosive growth was partly because the species
- E. Once here, its growth was explosive, partly because the species

Item 6.

- A. was preyed upon by very few native predators in its new environment.
- B. found very few predators in its new environment.
- C. found very few native predators and was seldom eaten in its new environment.
- D. was preyed on by very few native predator species in its new environment.
- E. was seldom eaten or preyed on by native predator species in its new environment.

Item 7.

- A. As a consequence, the zebra mussels did find
- B. Consequently, the zebra mussels could find
- C. In contrast, the zebra mussels could find
- D. In addition, the zebra mussels found
- E. For example, the zebra mussels found

Item 8.

- A. a plentiful food supply.
- B. an adequate supply of plentiful food.
- C. a sufficient supply of enough food.
- D. sufficient plenty of adequate food.
- E. plentiful food in adequate supply.

Item 9.

- A. They eat huge amounts of phytoplankton, which tiny free-floating sea organisms that dwell in water.
- B. They eat huge amounts of phytoplankton, free-floating sea organisms that are water-dwelling and tiny.
- C. They eat huge amounts of phytoplankton, sea-dwelling organisms which free-floating in water.
- D. They eat huge amounts of phytoplankton, tiny sea organisms that free-float in water.
- E. They eat huge amounts of phytoplankton, tiny free-floating sea organisms.

Item 10.

- A. Scientists are concerned when the mussels
- B. Scientists are concerned that if the mussels
- C. Scientists are concerned wherein the mussels
- D. Scientists are concerned that the mussels
- E. Scientists are concerned as if the mussels

Item 11.

- A. may compete aggressively with other
- B. may compete aggressively with others'
- C. may compete aggressively with others
- D. may compete aggressively with another's
- E. may compete aggressively with one another's

Item 12.

- A. species that depend on the same food supply.
- B. species that depend on other food supply.
- C. species that depend on in common food supply.
- D. species that depend on simultaneous food supply.
- E. species that depend on equal food supply.

Item 13.

- A. Being invasive, the species concerns industry, public utilities, and boat owners.
- B. The invading species concerns industry, public utilities, and boat owners.
- C. The species, by its invading, concerns industry, public utilities, and boat owners.
- D. The species, by its invasion, is concerning industry, public utilities, and boat owners.
- E. The invasive species is being of concern to industry, public utilities, and boat owners.

Item 14.

- A. Zebra mussels cluster in huge colonies, being anchored themselves to any hard surface.
- B. Zebra mussels cluster in huge colonies, which can anchor themselves to any hard surface.
- C. Zebra mussels cluster in huge colonies, which can anchor itself to any hard surface.
- D. Zebra mussels cluster in huge colonies, which can anchor them to any hard surface.
- E. Zebra mussels cluster in huge colonies, being anchored itself to any hard surface.

Item 15.

- A. These colonies can clog your water intake pipes
- B. These colonies can clog its water intake pipes
- C. These colonies can clog their water intake pipes
- D. These colonies can clog the water intake pipes
- E. These colonies can clog our water intake pipes

Item 16.

- A. of electric and water treatment plants. Fishery specialists
- B. of electric and water treatment plants fishery. Specialists
- C. of electric and water treatment plants, fishery specialists
- D. of electric and water treatment plants fishery, specialists
- E. of electric and water treatment plants fishery specialists

Item 17.

- A. are currently casting about and baiting their hooks to gun down
- B. are currently hatching plans for
- C. are currently searching for
- D. are currently trolling the depths of
- E. are currently skimming the surface of

Item 18.

- A. control methods that will cause the lowest amount of damage to water supplies and other aquatic species.
- B. control methods that will cause the lowest amount of damage, most of which is difficult to repair.
- C. control methods that will cause the lowest amount of damage to water supplies and other aquatic species (some of which are sources of food).
- D. control methods, which must be approved, that will cause the lowest amount of damage to water supplies and other aquatic species.
- E. control methods that will cause the lowest amount of damage (if they work) to water supplies and other aquatic species.

Item 19.

- A. Two of the alternatives exploring are
- B. Exploring, two alternatives are
- C. Two being explored are alternatives
- D. Two are explored alternatives, being
- E. Two alternatives being explored are

Item 20.

- A. interrupting the species reproductive cycle and finding a bacterium harmful only to zebra mussels.
- B. interrupting the specie's reproductive cycle and finding a bacterium harmful only to zebra mussels.
- C. interrupting the specie reproductive cycle and finding a bacterium harmful only to zebra mussels.
- D. interrupting the species' reproductive cycle and finding a bacterium harmful only to zebra mussels.
- E. interrupting the species's reproductive cycle and finding a bacterium harmful only to zebra mussels.

Item 21. Suppose the writer wishes to add a sentence after paragraph 1 that will both serve as a transition to the rest of the essay and explain the importance of the information in the paragraphs that follow. Which of the following sentences most effectively fulfills that purpose?

- A. The zebra mussel will provide a difficult challenge for public utility managers.
- B. The zebra mussel is only the latest in a series of immigrant species to thrive in the U.S.
- C. No one knows how far south and west the zebra mussel is likely to spread, but scientists think they may be on the trail of important clues.
- D. Although small in size, the zebra mussel may become a huge problem for pleasure boat owners in North American waterways.
- E. Despite its size, however, the zebra mussel may have a dramatic effect on North American waterways.

Item 22. If the writer wished to add at the end of the essay a paragraph expanding the discussion of these two alternatives, which of the following sentences would provide the most appropriate introduction?

- A. Many strains of bacteria populate the sea.
- B. The zebra mussel's method of reproduction is similar to that of the oyster.
- C. Ideally, these two methods could be used in combination to control the mussel.
- D. Some scientists hope there is a bacteria that can damage the reproductive cycle of the species.
- E. Fishery specialists are not working alone to resolve this problem; laboratories are involved.

Correct Answers: Sample Passage #1 Items

Item #	Key	Content Category	Item #	Key	Content Category
1	A	Punctuating Breaks in Thought	13	B	Relating Clauses
2	B	Observing Usage Conventions	14	E	Observing Usage Conventions
3	A	Observing Usage Conventions	15	A	Forming Verbs
4	A	Avoiding Unnecessary Shifts in Construction	16	D	Observing Usage Conventions
5	D	Editing and Revising Effectively	17	B	Forming Verbs
6	B	Establishing Logical Order	18	E	Punctuating Breaks in Thought
7	C	Editing and Revising Effectively	19	A	Tense
8	A	Establishing Logical Order	20	C	Using Pronouns
9	E	Indicating Possessives	21	A	Avoiding Unnecessary Punctuation
10	A	Tense	22	C	Maintaining the Level of Style and Tone
11	C	Judging Relevancy	23	D	Strategy – Audience
12	D	Redundancy	24	A	Making Decisions about Cohesion Devices

Correct Answers: Sample Passage #2 Items

Item #	Key	Content Category	Item #	Key	Content Category
1	B	Relating Clauses	12	A	Punctuating Relationships and Sequences
2	A	Avoiding Unnecessary Punctuation	13	A	Avoiding Unnecessary Punctuation
3	B	Relating Clauses	14	E	Forming Verbs
4	E	Forming Verbs	15	C	Establishing Logical Order
5	A	Editing and Revising Effectively	16	A	Choosing Words to Fit Meaning and Function
6	D	Editing and Revising Effectively	17	B	Punctuating Breaks in Thought
7	A	Choosing Words to Fit Meaning and Function	18	C	Establishing Logical Order
8	B	Avoiding Unnecessary Shifts in Construction	19	A	Observing Usage Conventions
9	A	Judging Relevancy	20	E	Assuring Grammatical Agreement
10	D	Relating Clauses	21	A	Making Decisions About Cohesion Devices
11	E	Avoiding Unnecessary Shifts in Construction	22	D	Adding or Revising Supporting Material

Correct Answers for the Sample Passage #3 Items

Item #	Key	Content Category	Item #	Key	Content Category
1	A	Observing Usage Conventions	12	A	Observing Usage Conventions
2	C	Forming Verbs	13	B	Managing Grammatical Agreement
3	A	Avoiding Unnecessary Punctuation	14	B	Assuring Grammatical Agreement
4	B	Establishing Logical Order	15	D	Using Pronouns
5	E	Relating Clauses	16	A	Punctuating Breaks in Thought
6	B	Editing and Revising Effectively	17	C	Choosing Words to Fit Meaning and Function
7	D	Establishing Logical Order	18	A	Judging Relevancy
8	A	Editing and Revising Effectively	19	E	Using Modifiers
9	E	Editing and Revising Effectively	20	D	Punctuating Relationships and Sequences
10	D	Relating Clauses	21	E	Adding or Revising Supporting Material
11	A	Punctuating Relationships and Sequences	22	C	Adding or Revising Supporting Material

COMPASS[®]/ESL

Sample Test Questions— A Guide for Students and Parents

Mathematics

Numerical Skills/Pre-Algebra

Algebra



An ACT Program for Educational Planning

Note to Students

Welcome to the COMPASS Sample Mathematics Test!

You are about to look at some sample test questions as you prepare to take the actual COMPASS test. The examples in this booklet are similar to the kinds of test questions you are likely to see when you take the actual COMPASS test. Since this is a practice exercise, you will answer just a few questions and you won't receive a real test score. The answer key follows the sample questions.

Once you are ready to take the actual COMPASS test, you need to know that the test is computer delivered and untimed—that is, you may work at your own pace. After you complete the test, you can get a score report to help you make good choices when you register for college classes.

We hope you benefit from these sample questions, and we wish you success as you pursue your education and career goals!

Note to Parents

The test questions in this sample set are similar to the kinds of test questions your son or daughter will encounter when they take the actual COMPASS test. Since these questions are only for practice, they do not produce a test score; students answer more questions on the actual test. The aim of this booklet is to give a sense of the kinds of questions examinees will face and their level of difficulty. There is an answer key at the end.

COMPASS Mathematics Tests

The COMPASS Mathematics Tests are organized around five principal content domains: numerical skills/prealgebra, algebra, college algebra, geometry, and trigonometry. To ensure variety in the content and complexity of items within each domain, COMPASS includes mathematics items of three general levels of cognitive complexity: basic skills, application, and analysis. A basic skills item can be solved by performing a sequence of basic operations. An application item involves applying sequences of basic operations to novel settings or in complex

ways. An analysis item requires students to demonstrate a conceptual understanding of the principles and relationships relevant to particular mathematical operations. Items in each of the content domains sample extensively from these three cognitive levels.

Students are permitted to use calculators on all current Windows® and Internet versions of COMPASS Mathematics Tests. Calculators must, however, meet ACT's specifications, which are the same for COMPASS and the ACT Assessment. These specifications are updated periodically and can be found at ACT's website at

<http://www.act.org/aap/taking/calculator.html>

Numerical Skills/Prealgebra and Algebra Tests

Numerical Skills/Prealgebra Placement Test

Questions in the Numerical Skills/Prealgebra Placement Test range in content from basic arithmetic concepts and skills to the knowledge and skills considered prerequisites for a first algebra course. The Numerical Skills/Prealgebra Placement Test includes items from more than a dozen content areas; however, a majority of the questions come from the following categories:

1. Operations with Integers
2. Operations with Fractions
3. Operations with Decimals
4. Positive Integer Exponents, Square Roots, and Scientific Notation
5. Ratios and Proportions
6. Percentages
7. Averages (Means, Medians, and Modes)

Sample items for each of these categories are presented later in this section.

Algebra Placement Test

The Algebra Placement Test is composed of items from three curricular areas: elementary algebra, coordinate geometry, and intermediate algebra. Each of these three areas is further subdivided into a number of more specific content areas. Overall, the Algebra Placement Test includes items from more than 20 content areas; however, the majority of test questions fall within the following eight content areas:

1. Substituting Values into Algebraic Expressions
2. Setting Up Equations for Given Situations
3. Basic Operations with Polynomials
4. Factoring Polynomials
5. Linear Equations in One Variable
6. Exponents and Radicals
7. Rational Expressions
8. Linear Equations in Two Variables

Sample items for each of these categories are presented later in this section.

Numerical Skills/Prealgebra

1. $54 - 6 \div 2 + 6 = ?$
 - A. 6
 - B. 24
 - C. 27
 - D. 30
 - E. 57
2. The lowest temperature on a winter morning was -8°F . Later that same day the temperature reached a high of 24°F . By how many degrees Fahrenheit did the temperature increase?
 - A. 3°
 - B. 8°
 - C. 16°
 - D. 24°
 - E. 32°
3. If $\left(\frac{3}{4} - \frac{2}{3}\right) + \left(\frac{1}{2} + \frac{1}{3}\right)$ is calculated and the answer reduced to simplest terms, what is the denominator of the resulting fraction?
 - A. 24
 - B. 12
 - C. 6
 - D. 4
 - E. 3
4. $\frac{1}{2} + \left(\frac{2}{3} \div \frac{3}{4}\right) - \left(\frac{4}{5} \times \frac{5}{6}\right) = ?$
 - A. $\frac{1}{16}$
 - B. $\frac{17}{27}$
 - C. $\frac{13}{18}$
 - D. $\frac{7}{9}$
 - E. $\frac{5}{6}$
5. Mr. Brown went grocery shopping to buy meat for his annual office picnic. He bought $7\frac{3}{4}$ pounds of hamburger, 17.85 pounds of chicken, and $6\frac{1}{2}$ pounds of steak. How many pounds of meat did Mr. Brown buy?
 - A. 32.10
 - B. 31.31
 - C. 26.25
 - D. 22.10
 - E. 21.10

6. Four students about to purchase concert tickets for \$18.50 for each ticket discover that they may purchase a block of 5 tickets for \$80.00. How much would each of the 4 save if they can get a fifth person to join them and the 5 people equally divide the price of the 5-ticket block?
- A. \$ 1.50
B. \$ 2.50
C. \$ 3.13
D. \$10.00
E. \$12.50
7. In scientific notation, $20,000 + 3,400,000 = ?$
- A. 3.42×10^6
B. 3.60×10^6
C. 3.42×10^7
D. 3.60×10^7
E. 3.60×10^{12}
8. Saying that $4 < \sqrt{x} < 9$ is equivalent to saying what about χ ?
- A. $0 < \chi < 5$
B. $0 < \chi < 65$
C. $2 < \chi < 3$
D. $4 < \chi < 9$
E. $16 < \chi < 81$
9. What value of χ solves the following proportion? $\frac{9}{6} = \frac{x}{8}$
- A. $5\frac{1}{3}$ B. $6\frac{3}{4}$ C. $10\frac{1}{2}$ D. 11 E. 12
10. If the total cost of x apples is b cents, what is a general formula for the cost, in cents, of y apples?
- A. $\frac{b}{xy}$ B. $\frac{x}{by}$ C. $\frac{xy}{b}$ D. $\frac{by}{x}$ E. $\frac{bx}{y}$
11. On a math test, 12 students earned an A. This number is exactly 25% of the total number of students in the class. How many students are in the class?
- A. 15
B. 16
C. 21
D. 30
E. 48

12. This year, 75% of the graduating class of Harriet Tubman High School had taken at least 8 math courses. Of the remaining class members, 60% had taken 6 or 7 math courses. What percent of the graduating class had taken fewer than 6 math courses?
- A. 0%
B. 10%
C. 15%
D. 30%
E. 45%
13. Adam tried to compute the average of his 7 test scores. He mistakenly divided the correct sum of all of his test scores by 6, which yielded 84. What is Adam's correct average test score?
- A. 70
B. 72
C. 84
D. 96
E. 98
14. A total of 50 juniors and seniors were given a mathematics test. The 35 juniors attained an average score of 80 while the 15 seniors attained an average of 70. What was the average score for all 50 students who took the test?
- A. 73
B. 75
C. 76
D. 77
E. 78

Correct Answers for Sample Numerical Skills/Prealgebra Items

Item Number	Correct Answer	Content Category	Item Number	Correct Answer	Content Category
1	E	Operations with Integers	8	E	Exponents
2	E	Operations with Integers	9	E	Ratios and Proportions
3	B	Operations with Fractions	10	D	Ratios and Proportions
4	C	Operations with Fractions	11	E	Percentages
5	A	Operations with Decimals	12	B	Percentages
6	B	Operations with Decimals	13	B	Averages
7	A	Exponents	14	D	Averages

Algebra

1. If $x = -3$, what is the value of $\frac{x^2 - 1}{x + 1}$?
- A. -4 B. -2 C. 2 D. $3\frac{2}{3}$ E. 5
2. Doctors use the term *maximum heart rate (MHR)* when referring to the quantity found by starting with 220 beats per minute and subtracting 1 beat per minute for each year of a person's age. Doctors recommend exercising 3 or 4 times each week for at least 20 minutes with your heart rate increased from its *resting heart rate (RHR)* to its *training heart rate (THR)*, where
- $$THR = RHR + .65(MHR - RHR)$$
- Which of the following is closest to the *THR* of a 43-year-old person whose *RHR* is 54 beats per minute?
- A. 197
B. 169
C. 162
D. 134
E. 80
3. When getting into shape by exercising, the subject's maximum recommended number of heartbeats per minute (h) can be determined by subtracting the subject's age (a) from 220 and then taking 75% of that value. This relation is expressed by which of the following formulas?
- A. $h = .75(220 - a)$
B. $h = .75(220) - a$
C. $h = 220 - .75a$
D. $.75h = 220 - a$
E. $220 = .75(h - a)$
4. An airplane flew for 8 hours at an airspeed of x miles per hour (mph), and for 7 more hours at 325 mph. If the average airspeed for the entire flight was 350 mph, which of the following equations could be used to find x ?
- A. $x + 325 = 2(350)$
B. $x + 7(325) = 15(350)$
C. $8x - 7(325) = 350$
D. $8x + 7(325) = 2(350)$
E. $8x + 7(325) = 15(350)$

5. Which of the following is equivalent to $3a + 4b - (-6a - 3b)$?

- A. $16ab$
- B. $-3a + b$
- C. $-3a + 7b$
- D. $9a + b$
- E. $9a + 7b$

6. What is the sum of the polynomials $3a^2b + 2a^2b^2$ and $-ab + a^2b^2$?

- A. $3a^2b - ab^2 + 3a^2b^2$
- B. $3a^2b - ab^2 + 2a^2b^2$
- C. $2a^2b + 3a^2b^2$
- D. $2a^2b^3 + 2a^4b^4$
- E. $-3a^3b + 2a^4b$

7. Which of the following is a factor of the polynomial $x^2 - x - 20$?

- A. $x - 5$
- B. $x - 4$
- C. $x + 2$
- D. $x + 5$
- E. $x + 10$

8. Which of the following is a factor of $x^2 - 5x - 6$?

- A. $(x + 2)$
- B. $(x - 6)$
- C. $(x - 3)$
- D. $(x - 2)$
- E. $(x - 1)$

9. If $2(x - 5) = -11$, then $x =$?

- A. $-\frac{21}{2}$
- B. -8
- C. $-\frac{11}{2}$
- D. -3
- E. $-\frac{1}{2}$

10. If $\frac{4}{5} + \left(-\frac{3}{10}\right) = x + 1\frac{1}{2}$, then $x =$?

- A. 2
- B. 1
- C. -1
- D. -2
- E. -10

11. For all nonzero r , t , and z values, $\frac{16r^3tz^5}{-4rt^3z^2} = ?$

- A. $\frac{-4z^3}{r^2z^2}$ B. $-\frac{4r^2z^3}{t^2}$ C. $-\frac{4rz}{t}$ D. $-4r^4t^4z^7$ E. $-4r^2t^2z^3$

12. For all $x > 0$ and $y > 0$, the radical expression $\frac{\sqrt{x}}{3\sqrt{x} - \sqrt{y}}$ is equivalent to:

- A. $\frac{3x - \sqrt{xy}}{9x + y}$ B. $\frac{3x - \sqrt{xy}}{3x + y}$ C. $\frac{3x + \sqrt{xy}}{9x - y}$ D. $\frac{3x + \sqrt{xy}}{3x - y}$ E. $\frac{x}{3x - y}$

13. For all $x \neq -4$, which of the following is equivalent to the expression below?

$$\frac{x^2 + 12x + 32}{x + 4}$$

- A. $x + 3$ B. $x + 8$ C. $x + 11$ D. $x + 16$ E. $x + 28$

14. Which of the following is a simplified expression equal to $\frac{9 - x^2}{x - 3}$ for all $x < -3$?

- A. $3x$ B. $x + 3$ C. $x - 3$ D. $-x + 3$ E. $-x - 3$

15. What is the slope of the line with the equation $2x + 3y + 6 = 0$?

- A. -6 B. -3 C. -2 D. $-\frac{2}{3}$ E. $\frac{2}{3}$

16. Point $A(-4, 1)$ is in the standard (x, y) coordinate plane. What must be the coordinates of point B so that the line $x = 2$ is the perpendicular bisector of \overline{AB} ?

- A. $(-6, 1)$ B. $(-4, -1)$ C. $(-4, 3)$ D. $(-2, 1)$ E. $(8, 1)$

Correct Answers for Sample Algebra Items

Item Number	Correct Answer	Content Category
1	A	Substituting Values into Algebraic Expressions
2	D	Substituting Values into Algebraic Expressions
3	A	Setting Up Equations for Given Situations
4	E	Setting Up Equations for Given Situations
5	E	Basic Operations with Polynomials
6	A	Basic Operations with Polynomials
7	A	Factoring Polynomials
8	B	Factoring Polynomials
9	E	Linear Equations in One Variable
10	C	Linear Equations in One Variable
11	B	Exponents
12	C	Exponents
13	B	Rational Expressions
14	E	Rational Expressions
15	D	Linear Equations in Two Variables
16	E	Linear Equations in Two Variables