



STUDY GUIDE

SAN ANTONIO ENTRY-LEVEL FIRE
DEPARTMENT EXAMINATION



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INTRODUCTION

The purpose of this study guide is to enable you to efficiently and effectively prepare to participate in the administration of the San Antonio Entry-Level Firefighter Examination (SAELFE), a state-of-the-art test to identify those individuals who will excel in careers with the San Antonio Fire Department. The examination will be a critical hurdle in the pathway toward achieving an employment opportunity as a firefighter with the San Antonio Fire Department. This guide will provide you with critical information about the examination that will allow you to prepare for the test-taking experience, hone your cognitive skills, minimize test-related anxiety and ultimately perform at your peak level.

This guide was created specifically for the SAELFE by the publisher of the examination. No other source of information will be as informative or accurate concerning the content and construction of the SAELFE.

HOW TO USE THIS STUDY GUIDE

This study guide will give you basic information about how to take the SAELFE. Read this information carefully so that you will know the instructions in advance. Thorough preparation for the SAELFE will increase your self-confidence; self-confidence, in turn, will increase your chances of getting a high score.

This study guide will also discuss the different types of questions that will appear on the test. The skills and abilities measured by the test will be defined. You will also find sample questions along with an answer key. Read the definition of each skill or ability carefully and then try the sample questions. After you have answered the sample questions, check your answers with the corresponding answer key.

You will also be provided with several important test-taking strategies. By following these tips, you will be able to complete the SAELFE more quickly and efficiently, and you will be able to improve your overall performance on the exam.

IMPORTANT NOTE

Do not memorize the sample questions and answers. Any question that has been released will not be used again. You may run into questions that will be very similar, but you will not be tested with any of these exact questions. These questions will give you good practice, but they will not give you the answers to any of the questions on your exam.

EXAMINATION OVERVIEW

The SAELFE will consist of 230 multiple-choice questions that will measure your cognitive abilities as well as your behavioral characteristics and attitudes. The entire examination will last three hours. The examination contains two sections: cognitive ability and behavioral-orientation. Be sure to pace yourself so that you can complete the entire exam. If you finish early, use the extra time to look over your work and check your answers. There is no bonus for finishing early, so we recommend that you use all of your time to perfect your exam.

WHAT DOES THE EXAMINATION MEASURE?

The SAELFE was designed to measure numerous areas that are related to successful performance as a San Antonio Fire Department firefighter. Specifically, the examination contains questions covering two broad areas: cognitive ability and behavioral-orientation. It is important to note that the examination does not measure job knowledge or any specific skills that require specialized training. You will not need any specific firefighting knowledge or skills to succeed on the examination.

COGNITIVE ABILITIES

The SAELFE assesses nine cognitive abilities:

Cognitive Abilities	
Deductive Reasoning	Visualization
Written Comprehension (Reading)	Spatial Orientation
Vocabulary	Number Facility
Information Ordering	Written Expression (Grammatical Sensitivity)
Inductive Reasoning	

These cognitive ability areas have been demonstrated to be essential for success in the San Antonio Fire Department firefighter job based on job analytic research.

BEHAVIORAL-ORIENTATION

In addition to cognitive ability, the SAELFE measures behavioral characteristics and attitudes that are necessary for effective job performance as a firefighter. For the items in this section, you will indicate your level of agreement with the presented statements. There are no obvious "correct" or "incorrect" responses to these types of items as there are for the cognitive questions.

TAKING THE EXAMINATION

The SAELFE will consist of an 80-item cognitive ability measure and a 150-item behavioral-orientation measure. The examination is administered in-person.

When you arrive at the examination site on the day of the test, you will need to follow the proper check-in procedures. Listen carefully and follow all instructions. Any infraction of the rules will be considered cheating, and you will be dismissed from the test. The proctors will distribute the tests; DO NOT open the test booklets until you are told to do so. The examiner will read aloud instructions for filling in your answer sheet and taking the test. Listen carefully to these instructions and be sure to ask any questions that you may have .

You will have three (3) hours to complete the exam. There will be no break between sections, and there will be no separate time limit. Be sure to pace yourself so that you can complete the entire exam. If you finish early, use the extra time to look over your work and check your answers. There is no bonus for finishing early, so we

EXAMINATION OVERVIEW

recommend that you use all of your time to perfect your exam. On the day of the exam, your answer sheet will be collected and sent to I/O Solutions for scoring. The San Antonio Fire Department will post all scores on their website 4-6 weeks after the test.

IMPORTANT NOTES

Since your answer sheet will be machine-scored, it is vital that you fill out your answer sheet clearly and correctly. If your answer sheet is marked incorrectly, you may not receive credit for correct answers.

When you are filling in circles, blacken your answer space firmly and completely (e.g., ●). This is the only way to correctly mark the answer sheet. If you mark the answer space with ∅, ●, ⊗ or (✓), the machine will not be able to read your answer.

Mark only one answer for each question. If you mark more than one answer, your responses will be marked as incorrect, even if one of them is correct.

If you decide to change an answer, make sure to erase your mark completely. An incomplete erasure may be read as a second answer, and your response will be marked as incorrect.

Only the answer sheet will be scored; be sure to mark all of your answers on the answer sheet. Correct answers written in the test booklet will not count.

Most importantly, make sure that each response has been marked in the correct space. Question 1 must be in space 1; question 42 in space 42. If you accidentally skip a line and mark answers in the wrong places, you must erase all of the incorrect responses and mark your answers again in the correct spaces. Because you only have a limited time in which to complete the San Antonio Entry-Level Firefighter Exam, be sure to look at the number of the question and ensure that you are marking the space with the same number for *each* question.

Please note that all of this information will be repeated to you when instructions are read for the exam.

SECURITY NOTE:

- Do **not** remove any test material from the test room and do not paraphrase, reconstruct, or reproduce the test material in any way, either orally or in writing.
- Do **not** discuss the test material with others.
- Be careful to follow instructions and observe test security requirements before, during, and after the test.

CHEATING

Test proctors will be present to instruct test takers and to monitor the security and fairness of the testing process. If any candidate is determined to have in any way violated test rules or engaged in dishonest behavior, that individual may be removed from the testing process by test proctors and may be disqualified. Any behavior that demonstrates a willful violation of the test rules or dishonest behavior (e.g., viewing another test-taker's answers, talking with other test takers, sharing answers with other parties) may result in disqualification. You should seek to avoid the appearance of any wrong-doing throughout the test-taking process. Keep your eyes on your testing materials and do not engage in conversation with other test-takers during the test.

TEST ETIQUETTE

It is important that you be respectful to other test takers seated around you. Do not make loud noises or engage in distracting behavior during the course of the test administration. If you use the washroom or exit the test facility, do so quietly and with as little distraction as possible.

Cognitive abilities are capabilities of our brains to perceive, reason, understand, manipulate and interact with stimuli in the world around us. Cognitive abilities are honed through education, training and practice. The SAELFE assesses nine cognitive abilities: deductive reasoning, written comprehension (reading), vocabulary, information ordering, inductive reasoning, visualization, spatial orientation, number facility, and written expression (grammatical sensitivity).

Understanding each cognitive ability, considering your personal strengths and weaknesses, and allocating time to practice cognitive abilities that you tend to be weak in is one of the best ways you can prepare for the examination.

In order to better familiarize you with the diversity of questions you will experience in the cognitive section of the examination, this study guide will describe each cognitive ability area and the manner in which it might be demonstrated on the job. These descriptions, along with sample questions, will help you prepare for the examination. Your performance on the cognitive section of the examination can be dramatically improved by reviewing these sample questions and the discussion section following each question regarding the proper methods of solving each type of question.

DEDUCTIVE REASONING

Deductive reasoning is the ability to apply rules and principles to make decisions about what to expect from a specific situation. It involves applying general rules to specific problems to produce logical answers. An example of utilizing deductive reasoning on the job might be the decision to use one chemical or mechanical fire-extinguishing agent over another or one medication over another. The following question will allow you to assess your deductive reasoning ability, identify any areas of weakness, and learn the proper method for solving this type of question.

SAMPLE QUESTION 1

Please use the information presented below to answer Sample Question 1.

Engine Type	Minimum Tank Capacity	Maximum Tank Capacity
Type 3	500 gallons	1,500 gallons
Type 4	750 gallons	1,000 gallons
Type 5	400 gallons	750 gallons
Type 6	150 gallons	400 gallons
Type 7	100 gallons	400 gallons

Classification of Fire	Intensity	Water Needed to Extinguish	Additional Extinguisher Helpful?
Class A: Wood, Paper, Cloth, etc.	Low	150 – 300 gallons	No
	Medium	350 – 400 gallons	Wet Chemical Fire Extinguisher
	High	500 – 750 gallons	Foam Fire Extinguisher
	Extreme	800 – 1,100 gallons	Wet Chemical Fire Extinguisher
Class B: Grease, Oil, Paint, etc.	Low	200 – 400 gallons	Foam Fire Extinguisher
	Medium	450 – 600 gallons	Foam Fire Extinguisher
	High	650 – 750 gallons	Carbon Dioxide Fire Extinguisher
	Extreme	750 – 900 gallons	No
Class C: Electrical Panel, Motor, Wiring, etc.	Low	300 – 400 gallons	No
	Medium	600 – 1,000 gallons	Clean Agent Extinguisher
	High	1,100 – 1,250 gallons	Clean Agent Extinguisher
	Extreme	1,300 – 1,500 gallons	Carbon Dioxide Fire Extinguisher
Class K: Cooking Fires (Vegetable Oils or Animal Fats)	Low	200 – 400 gallons	No
	Medium	500 – 750 gallons	No
	High	800 – 1,000 gallons	Wet Chemical Fire Extinguisher
	Extreme	1,100 – 1,500 gallons	Wet Chemical Fire Extinguisher

1. Firefighters are dispatched to an extreme intensity fire that began when vegetable oil ignited while someone was cooking on the stove-top in a restaurant kitchen. What type of engine should the crew take in order to extinguish the flames?
 - a. Type 3
 - b. Type 4
 - c. Type 5
 - d. Type 6

Discussion

Before you read the information in the tables, read the question carefully. This question is asking you to identify which type of engine the crew should take to extinguish flames based on some specific facts described in the question. Knowing that you are trying to identify which type of engine should be sent, you can read the information contained in the tables with this in mind. It may also be helpful to highlight key words and descriptions within the table that are in line with the description presented in the question.

Based on the question, we can determine that the fire intensity is extreme and using vegetable oil while cooking was the cause of the fire. With this in mind, we can look at the bottom table and focus only on the rows that provide information for the “extreme” intensity. Additionally, we can further narrow down the information by classification of fire. We know that the fire started when vegetable oil ignited while cooking. Therefore, this would be considered a Class K fire. Thinking back to the original question, we are tasked with identifying which engine the crew should take. This information is provided using the top table. The engine type is determined by the water tank capacity. We can then look back at the bottom table at the “Water Needed to Extinguish” column, as well as using the information from the paragraph above.

Using all three pieces of information, we need to determine how much water is needed to extinguish an Extreme, Class K fire in order to identify the correct engine type. Based on the bottom table, an Extreme Class K fire requires 1,100 – 1,500 gallons to extinguish the flames. We then use this information and look at the top table. Type 3 has a minimum tank capacity of 500 gallons and a maximum tank capacity of 1,500 gallons. Based on this information, we know a Type 3 engine has enough water to extinguish the fire. This would mean the option “a” is correct.

While having identified that option “a” is correct, it is best practice to ensure that you can rule out all other answer options to make sure that you did not interpret the question or table incorrectly. Option “b” states that a Type 4 engine should be sent. Looking at the top table, we know a Type 4 engine has a maximum tank capacity of 1000 gallons. Based on the water needed to extinguish an Extreme, Class K fire (i.e., a minimum of 1,100 gallons), a Type 4 engine would not be appropriate to send. Using the same logic for options “c” and “d”, the maximum tank capacities (750 and 400 gallons, respectively) are not enough to extinguish the fire. Therefore, option “a” is the correct answer.

Correct answer: A

DEDUCTIVE REASONING TIPS

For deductive reasoning questions, you will be asked to review a table containing definitions, rules, or policies. You will then be given a specific situation related to the information presented and have to determine the best answer based on the question asked. A common mistake made by candidates when responding to deductive reasoning questions is to attempt to answer the question without carefully considering the information in the table. Often candidates will assume that they are familiar with the information in the table(s) and will use their own knowledge to answer the question. This might lead a candidate to answer the question without reading the full table. Remember, the information that is provided is **all** that is necessary to answer the question. Do not use prior knowledge of the topic to determine the answer. If you do not use the information provided, there is a chance that you will answer the question incorrectly.

The SAELFE will contain questions like Sample Question 1. The information that is provided is essential for answering the question. All such questions should be approached in the manner described here. To improve your deductive reasoning and ultimately perform at your best on the SAELFE, you should refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

READING

Reading is the ability to read written words and sentences and understand what is being communicated. Firefighters are required to read and understand a vast amount of training materials and are confronted with on-going professional training throughout their careers that is presented in a written format. When firefighters read training materials, it is essential that they are able to understand the meanings of the words presented to them in a written context. Firefighters

also have to read and understand policies, directives and tactical plans, and must be able to understand the definitions of the words they are reading in the context in which they are presented.

Questions on the test will assess your reading ability using two different formats. The first format will require you to answer questions based on your understanding of the passage (see Sample Question 2). The second format will assess your vocabulary by asking you to identify the meaning of an underlined word in the passage (see Sample Question 3). The following questions will allow you to assess your reading ability, identify any areas of weakness, and learn the proper method for solving this type of question.

SAMPLE QUESTION 2

Please use the following passage to answer Sample Question 2.

In the past five years, the Loveland community had 41 residential house fires. The majority of the fires happened as a result of human error and were preventable. The Loveland Fire Department decided to implement a two-part community initiative to prevent future residential fires. The first part of the initiative involved firefighters educating the public on how to prevent fires. For the second part, the Loveland Fire Department participated in the nationwide safety initiative called “Sound the Alarm.”

The first part of the initiative involved a two-part educational program. The first portion focused on educating school children. Firefighters believed it was important to educate elementary school kids because young children make up the largest percentage of household fire fatalities. Firefighters and teachers worked together to create a child-friendly presentation that was hands-on and informative. During the presentation, firefighters taught children fire safety, specifically what to do if a fire happens in their homes. Additionally, the Loveland Fire Department drove two fire engines to the schools and gave children tours of the engines.

The second portion of the educational program involved educating the public about fire safety, with a focus on teaching the elderly. 75% of the house fires that occurred in the Loveland community were at an elderly person’s home. To reach a broad audience, the fire department designed fire safety brochures that discuss the most common ways fires occur, preventative measures all people should take, and what to do if a fire does start. Firefighters passed out brochures at various community events and at senior living homes.

To make a direct impact in homes, the Loveland Fire Department participated in the “Sound the Alarm” initiative. This initiative promotes the importance of having fire alarms in every room of a house. In addition to educating the public, firefighters also installed fire alarms in people’s homes for free. After two months of promoting “Sound the Alarm,” the fire department installed fire alarms in 120 homes. 90 of the homes were owned by elderly individuals.

After one year of focusing on the two-part fire safety initiative, the Loveland Fire Department has seen a 30% decrease in house fires. Additionally, the department continues to have community wide events to promote “Sound the Alarm,” resulting in more homes having fire alarms.

2. The main idea of the passage is that ____.

- a. the nationwide initiative “Sound the Alarm” was the most effective way for reducing house fires because too many homes in the Loveland community did not have fire alarms
- b. the Loveland Fire Department had to act after realizing that a majority of residential fires in the community could have been prevented
- c. the Loveland Fire Department implemented an initiative in order to reduce the number of house fires, which focused on education and increasing the number of households with fire alarms
- d. the education of elementary school children was a critical component of the fire safety initiative, which involved an informative and hands-on presentation

Discussion

This question measures your reading ability, or your ability to read a lengthy passage and summarize the theme of that passage into a single statement. In order to do this, you have to identify what the author sought to communicate and select the answer option that best summarizes that thought.

The best strategy to use in responding to reading questions, or any question that requires you to read a lot of information, is to first review the question. Knowing what you are trying to answer will allow you to read the passage with a keen eye. After you review the question, carefully read through the passage and keep in mind the question that you are trying to answer. Take your time reading the passage. Rushing or skipping over sections will only make it more difficult to arrive at the correct answer. Worse, you will probably end up having to read the passage again. So, slow down and read for understanding the first time.

As you read each paragraph, it is helpful to underline key sentences that help summarize the paragraph or make short notes in the margins to summarize the theme of each paragraph. Following are sample notes you might keep to summarize each paragraph:

- Paragraph 1: The Loveland Fire Department created a two-part initiative to help prevent future residential fires after realizing many fires that started were preventable.
- Paragraph 2: The first part of the educational program focused on educating children in schools about fire safety and what to do if a fire starts in their home.
- Paragraph 3: The second part of the educational program focused on educating the public, with a focus on the elderly community, after determining that a majority of fires in the community occurred at an elderly person's home.
- Paragraph 4: The fire department participated in "Sound the Alarm," which involved educating the public on the importance of having fire alarms installed in every room in the house and also installing fire alarms in people's homes for free.
- Paragraph 5: The initiative reduced fires after one year and fire alarms are continuously being installed in homes.

The question asks you about the main idea of the passage. By reviewing your summary notes, you can synthesize the key information from the passage to arrive at a conclusion.

By combining the summary notes, we arrive at the following conclusion: in order to prevent fires, a two-part initiative was developed (Paragraph 1) that focused on educating the public, specifically young children and elderly people (Paragraphs 2 and 3) and installing smoke alarms in people's homes for free (Paragraph 4); the initiative reduced the number of fires and fire alarms are continuing to be installed (Paragraph 5). By knowing that these are the key points from the passage, you can systematically review the answer options to see which one best fits.

Option "a" is incorrect because, while it is implied by the passage, it is never actually stated that the number of house fires was lower only as a result of the "Sound the Alarm" initiative. Additionally, this option is too specific and focuses on a single fact that is implied by the passage; it is important to consider the passage as a whole when determining the main idea.

Option "b" is incorrect because the statement is too broad. Option "b" does not provide any information on how the fire department actually addressed the large number of fires. Therefore, too much information is missing for option "b" to be correct.

Option "c" fits the conclusion we produced by combining our summary notes about the passage. It mentions the key points from the passage and summarizes them into a general conclusion about the passage: "an initiative that focused on educating people and installing smoke alarms in people's homes to reduce the number of fires."

Option “d” is directly mentioned in the passage in Paragraph 2. However, like option “a,” this option is too specific. It does not take into account the information presented throughout the entire passage and instead focuses on a single fact. Option “d” is therefore incorrect.

Based on this analysis, you should select “c” as the correct answer.

Correct answer: C

SAMPLE QUESTION 3

Please use the passage above to answer Sample Question 3.

3. The underlined word “prevent” in the passage most closely means ____.

- a. allow
- b. stop
- c. rule out
- d. encourage

Discussion

This question measures your ability to use context clues within a given passage to identify the meaning of a given word. To the extent that you are familiar with a wide breadth of words and their meanings, you should be able to recognize which answer option most closely defines the given word.

In order to answer this question, you should first find the given word within the passage. The underlined word “prevent” can be found in the third sentence of the first paragraph. Read the sentence containing the underlined word. You should attempt to determine the definition of the word based on the context in which it is presented. Then read the answer options and see if the correct answer noticeably stands out to you.

If you cannot immediately identify the correct answer, replace the underlined word with each answer option and read the sentence. Try to decide if the sentence makes sense with the answer option replacing the underlined word. Eliminate answer options that you know are incorrect, and then make your best guess.

In this question, the definition of the underlined word “prevent” is “keep something from happening or arising.” The definition of option “a,” allow, is “give someone or something permission to do something.” The definition of option “b,” stop, is “cause (an action, process, or event) to come to an end.” The definition of option “c,” rule out, “is to exclude someone or something as a possibility.” The definition of option “d,” encourage, is “give support, confidence, or hope to.”

In this question, the correct answer is “b.” Specifically, the word “stop” is the closest match to the word “prevent.” By utilizing the context of the sentence and your knowledge of vocabulary, you can conclude that the correct answer is option “b.”

Correct answer: B

READING TIPS

For all reading questions on the examination, you will be given a passage to read. Some questions will then ask you to summarize the main idea of the passage and recall details from the passage. In order to answer the questions correctly, you must understand the meaning of the preceding passage.

The most common error you are likely to make in responding to a question like this is to select an answer that sounds correct, because the information comes from the passage, but is not relevant or accurate based on the specific question that is asked. Your challenge is to carefully read and understand the passage and the question that is asked. When you are asked about a passage’s main idea, be careful not to focus too much on specific facts or pieces of information

presented. Think about all of the important information presented and combine it to produce a statement summarizing the entire passage.

Other reading items on the examination will ask you to choose the correct definition of an underlined word within a passage. This type of question will require you to be familiar with a variety of words and their meanings. The more words you know, the better your chances of succeeding. Therefore, to increase your vocabulary, you should consider referencing study aids or books developed for standardized test preparation. Additionally, vocabulary building is easiest when you encounter words while reading. Whether it is books, magazines, or online articles, written passages will often contain words that you are unfamiliar with. Whenever you come across a word you are not familiar with, you should look up its definition. Doing this will help you expand your vocabulary and become familiar with the definitions of a wider array of words.

All reading questions on the examination will contain a focal passage and questions that are highly similar to the questions you see here. To improve your reading and ultimately perform at your best on the SAELFE, you should refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

INFORMATION ORDERING

Information ordering is the ability to identify the best or proper order of given actions or steps. It also involves your ability to place events in a logical and meaningful order. This involves determining the order in which each event in a scenario occurred to produce an accurate timeline. This ability is fundamental to understanding the proper order of steps in performing a specific task safely.

Firefighters often use information ordering when they collect facts and accounts from witnesses and then attempt to piece together the sequence of events based on different pieces of information. This ability is also used in applying first aid, following a procedure in operating equipment or arranging sentences in a meaningful paragraph.

The following question will allow you to assess your information ordering ability, identify any areas of weakness, and learn the proper method for solving this type of question.

SAMPLE QUESTION 4

Please use the passage below to answer Sample Question 4.

Tyler Romeo witnesses a traffic accident that caused a vehicle fire. His description of the accident includes the following six statements. The statements are not in order.

1. The driver of the Suburban quickly approached the traffic jam, slammed on the brakes, and swerved into the intersection to avoid hitting the vehicles.
2. The Suburban then continued through the intersection into oncoming traffic in the opposite lane.
3. I moved to the right lane so the Suburban could pass me, but then I noticed a large traffic jam ahead.
4. I called 911 when the vehicles collided. Both the sedan and Suburban were totaled and the sedan caught on fire.
5. When the Suburban entered the opposite lane, traffic on that side came to a halt, but only after the Suburban was hit by a sedan.
6. I was driving on Highway 70 when I noticed a grey Suburban speed up very quickly behind me.

4. Which of the following is the correct order of the above statements?

- a. 6, 3, 1, 2, 5, 4
- b. 6, 3, 2, 5, 1, 4
- c. 6, 5, 3, 2, 1, 4
- d. 6, 3, 2, 1, 5, 4

Discussion

In order to answer this question, you must first read through all six statements. When reading through them, you may wish to make notes by each step indicating that it comes earlier or later in the process. If you identify the two or three steps that come earlier, the two or three steps in the middle, and the two or three steps that come later, you can then go back and rank-order these statements in smaller groups. This takes a complex task and breaks it into more manageable pieces.

These statements provide a sequence of events that took place during a traffic accident that resulted in a vehicular fire. After reading through all the statements, you will notice that the statements describe the scene prior to the accident, during the accident and just after the accident. Based on this analysis, you can make some quick notes to attempt to place the statements into meaningful groups. Statements 1, 2, and 3 must have occurred before the accident, because we know from skimming the subsequent statements that the Suburban was involved in the accident. You should write “before” next to these first three statements. Statement 4 occurred after the accident, because the witness indicates that both the sedan and Suburban were totaled. You should write “after” next to statement 4. Statement 5 occurred during the accident, because it details exactly how the collision happened. Finally, statement 6 occurred before the accident, as it informs us that the Suburban was speeding.

You will note that you have four statements that come before the accident, one during the accident and one after the accident. Since your goal is to place these events in chronological order, you can immediately designate statement 4 as the last event because it is the only one to have occurred after the accident. You can also immediately designate statement 5 as the second to last event, as it is the only one that occurred during the accident. This quick assessment allows you to immediately dismiss answer options “b” and “c” because they do not list statement 5 as the second to last event.

Looking at the statements that come before the accident, statements 1, 2, 3, and 6, you should attempt to order these chronologically. You will notice that statement 6 is likely the first event in the series because this statement has the witness first noticing the speeding Suburban behind him. Because the Suburban is speeding up behind the witness, it would make sense that the next event would have the witness switching lanes so the Suburban could pass. Statement 3 fits as the second event. Statement 1 would be the third event because it has the Suburban approach the traffic jam mentioned in statement 3 and swerve into the intersection. This statement also points to the fourth statement as the suburban continues through the intersection into oncoming traffic. This leaves statement 2 to be the fourth in the series. So, of these first four statements, we can organize them as follows: 6, 3, 1, and 2. The entire sequence is 6, 3, 1, 2, 5, 4. Option “a” is therefore the correct response based on your organization of the six statements.

Once you have determined the proper sequence, read the statements through in order and make sure that the sequence makes logical sense. If so, you have found the appropriate solution.

Correct answer: A

INFORMATION ORDERING TIPS

The most common mistake that is made in Information Ordering questions is failing to read all the steps before beginning the organization process. You cannot determine the order of statements, or even categorize them effectively, until you have considered all the choices. Another common mistake is failing to review the steps in order after you have drawn a

conclusion regarding their order. This last check ensures that the sequence is logical. Often you will find that it makes sense to switch one or two of the steps around to allow the sequence to flow better.

The Information Ordering items on the SAELFE will all follow the same format as Sample Question 4. All such questions should be approached in the manner described here.

To improve your Information Ordering ability and ultimately perform at your best on the SAELFE, you should refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

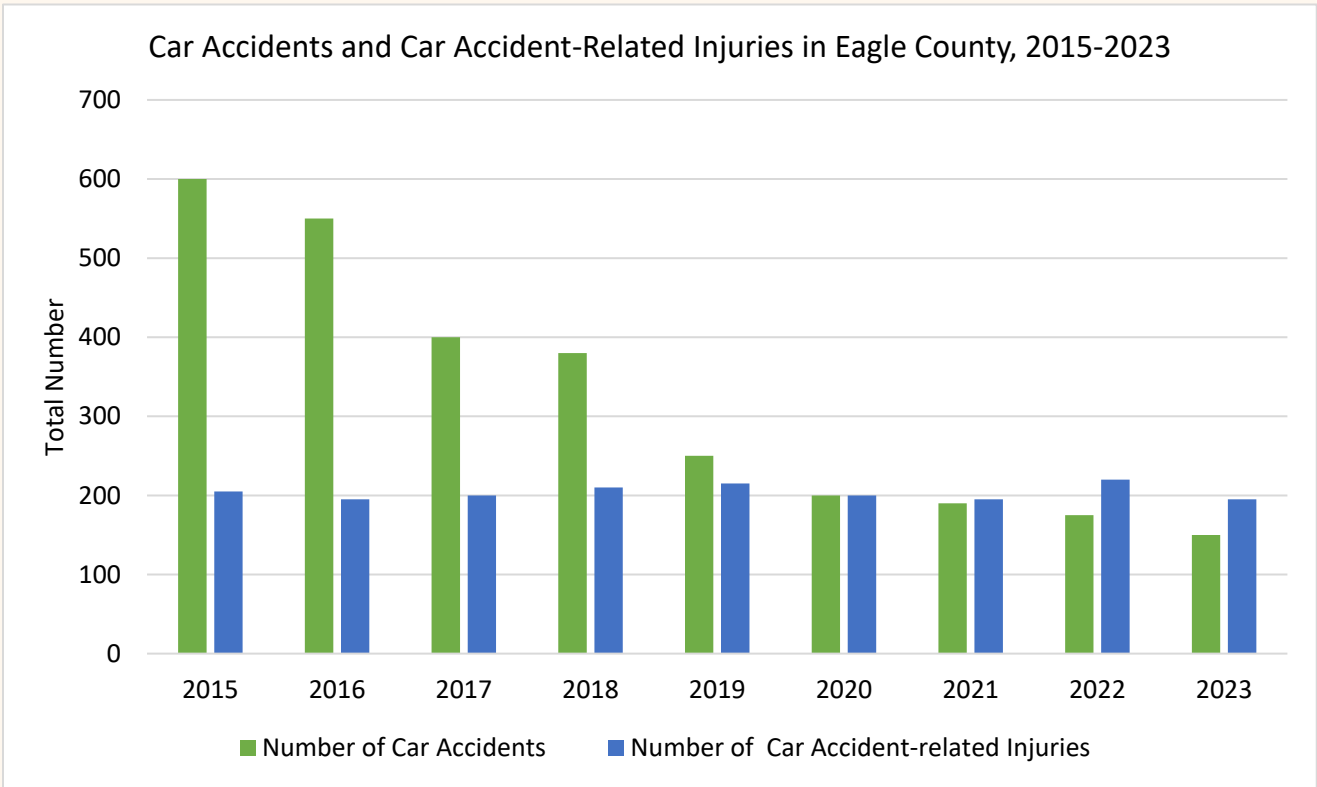
INDUCTIVE REASONING

Inductive reasoning is the ability to combine separate pieces of information, or specific answers to problems, to form general rules or conclusions. Firefighters frequently exercise this ability when they take in multiple pieces of information. One example of this ability is determining the point of origin of a fire or finding repeated violations of a fire code during building inspections.

The following question will allow you to assess your inductive reasoning ability, identify any areas of weakness, and learn the proper method for solving this type of question.

SAMPLE QUESTION 5

Using the graph below, please answer Sample Question 5.



5. Which of the following statements would BEST explain the relationship between the number of car accidents and the number of car accident-related injuries between 2015 and 2023?

- a. The number of car accidents and the number of car accident-related injuries both steadily decreased after laws were passed in 2016 that made texting and driving illegal.
- b. The number of car accidents steadily decreased due to less distracted driving, but the number of car accident-related injuries did not decrease because passengers did not wear seat belts while in the back seat.
- c. The number of car accidents increased each year due to an increase in young drivers on the road. However, the number of car accident-related injuries decreased because firefighters educated high school students on the importance of wearing seatbelts.
- d. The number of car accident-related injuries decreased while the number of car accidents remained constant because there was less rain and accidents were less severe.

Discussion

This question measures inductive reasoning, or your ability to combine information to arrive at a conclusion about what happened. In this case, you need to consider how the trends change for both the number of car accidents and the number of car accident-related injuries. The Y-axis, or the vertical axis, on the chart describes the total number of either car accidents or car accident-related injuries. The X-axis, or the horizontal axis, on the chart provides information for each year for both variables. You'll find a legend below the chart that assigns a specific color to each variable for the bar graph. The bar graphs that are green depict the number of car accidents and the bar graphs that are blue depict the number of car accident-related injuries. You will use this information to answer the question.

Option "a" states that both variables steadily decreased. We need to examine the graph and determine the trend for both variables between 2015 and 2023. Based on the graph, the number of car accidents steadily decreased. However, the number of car accident-related injuries stayed relatively consistent. Therefore, option "a" is incorrect.

Option "b" states that car accidents decreased, but car accident-related injuries did not. We previously established that the number of car accidents steadily decreased. When examining the number of car accident-related injuries from 2015-2023, the number does not consistently increase or decrease. Therefore, option "b" is correct. We recommend continuing to rule out options "c" and "d" to ensure that you correctly interpreted the question and chart.

Option "c" states that the number of car accidents increased, and the number of car accident-related injuries decreased. Based on the graph, the number of car accidents actually decreased, therefore we can rule out option "c."

Option "d" states the number of car accident-related injuries decreased while the number of car accidents remained constant. As we previously established, the number of car accident-related injuries remained relatively consistent. Therefore, option "d" is incorrect.

Based on this logic, you should select option "b" as the correct answer.

Correct answer: B

INDUCTIVE REASONING TIPS

Be sure to carefully examine every aspect of the charts or graphs provided and every part of the answer options. Commonly, candidates will make errors on these types of questions because they are rushing and fail to generate a clear picture of the situation. Ensure that you do not draw conclusions based on a single variable. If you misread a number or a label, you will not be able to reach the correct conclusion. You should synthesize the information provided for all variables in order to draw conclusions and answer the questions that are asked.

All the questions on the SAELFE that assess inductive reasoning will involve analyzing charts or graphs. To improve your inductive reasoning and ultimately perform at your best on the SAELFE, you should refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

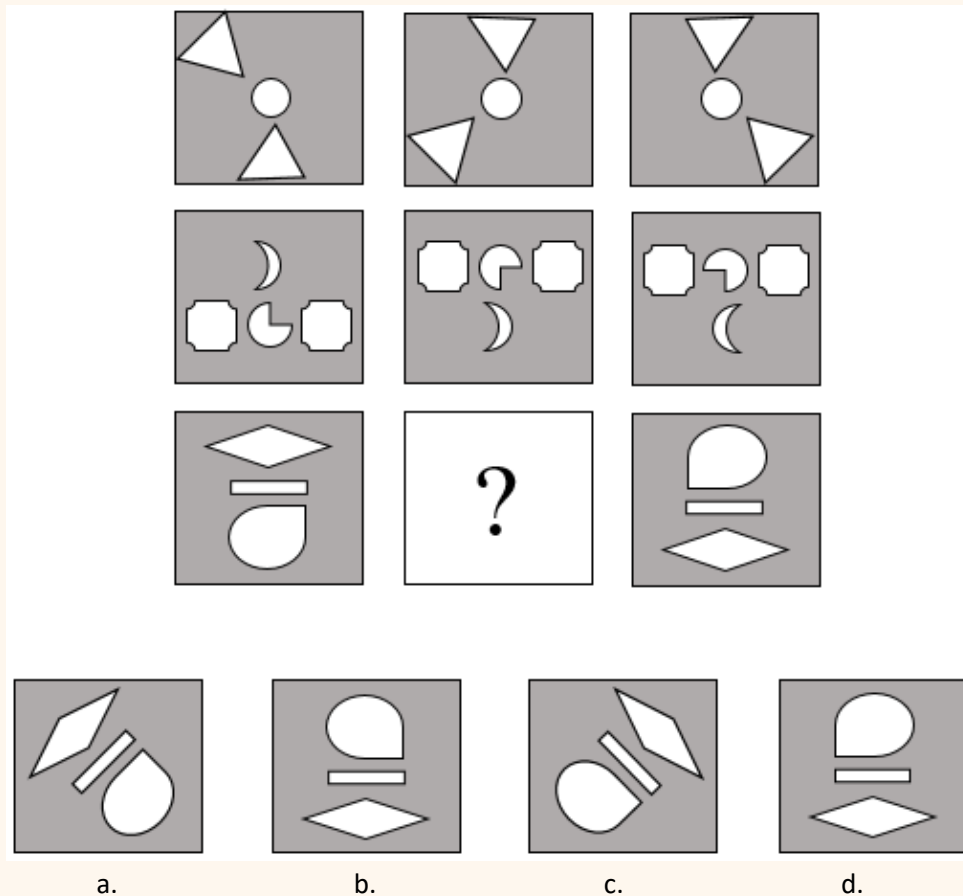
VISUALIZATION

Visualization is the ability to imagine how something will look after it is moved around or when its parts are moved or rearranged. Firefighters use visualization when planning to navigate through a burning building or locating potential victims, especially in situations with low visibility.

The sample question will help you assess your visualization ability and learn the right method for solving this type of question.

SAMPLE QUESTION 6

For the following item, a unique pattern is presented. Please select the tile that fits into the blank “?” box and completes the pattern.



Discussion

This question measures visualization, or your ability to identify a visual pattern when parts of the pattern are presented or moved around. In this case, you need to consider the presented pattern. You must then choose the shape that fits into the blank space containing the question mark.

Begin by determining the direction of the pattern in the presented image (does the pattern move from left to right or up and down across the image?). In this image, the pattern moves from left to right, as each row has its own set of similar

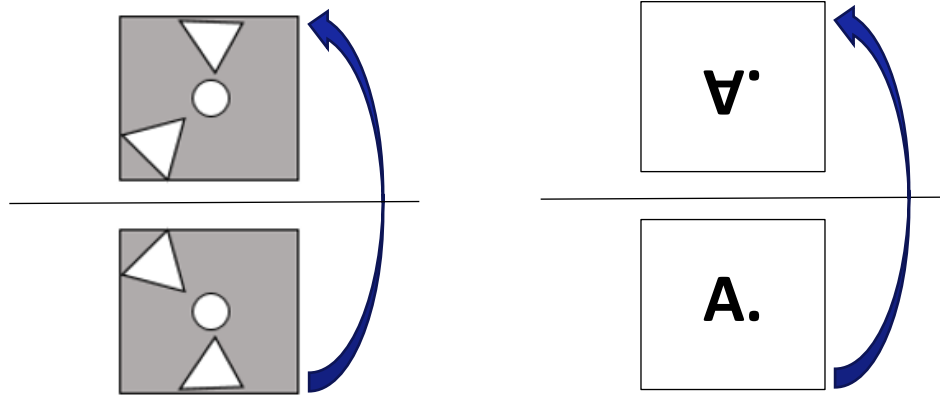
blocks. Next, try to find the change from one item in the sequence to the next. It could be helpful to make a note next to the image about the type of change that has been made.

In the pattern above, start with the top row. From the left image to the center image, the tile has been flipped vertically (up and down).

Step 1: Imagine flipping the starting image or folding the image across the line to get to the center image. A simpler example image demonstrates the concept.

Ending center block

Starting left block

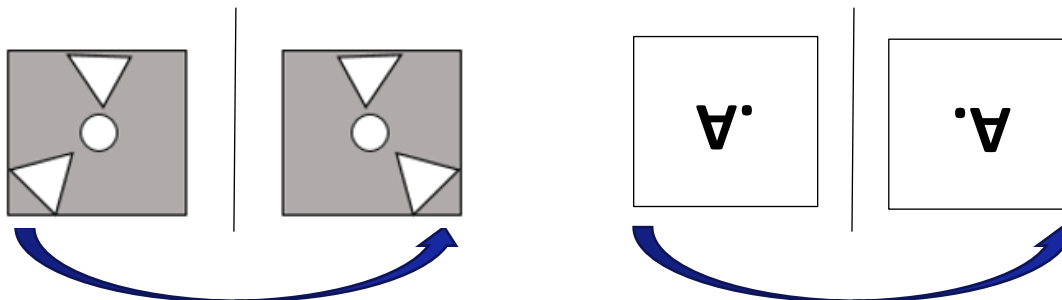


Next, from the center image to the right image, the tile has been flipped horizontally (from left to right).

Step 2: Imagine flipping the starting center block or folding the image across the line to get to the right image. A simpler example image demonstrates the concept.

Starting center block

Ending right block



To confirm that this is the pattern that exists throughout the image, next you should look at the second row. From the left image to the center image, the tile has been flipped vertically (up and down), as in Step 1. From the center image to the right image, the tile has been flipped horizontally (left to right), as in Step 2. This is the same pattern as the first row. This confirms that this is the pattern that should be copied in the third row.

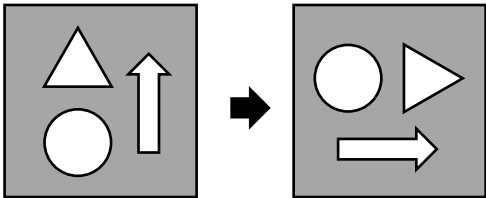
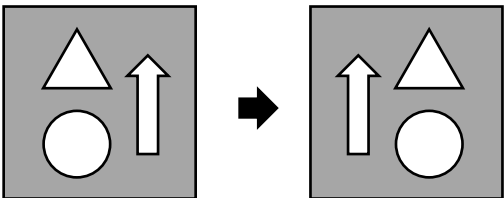
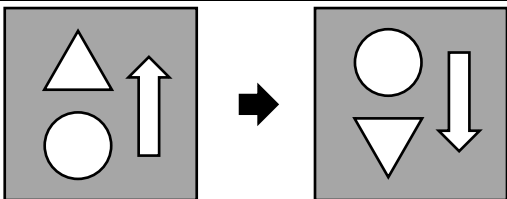
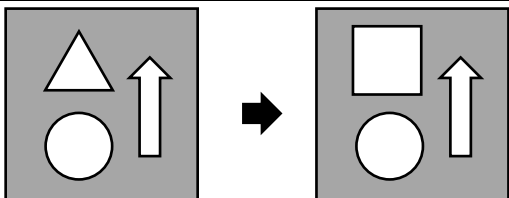
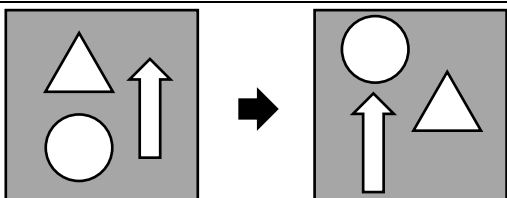
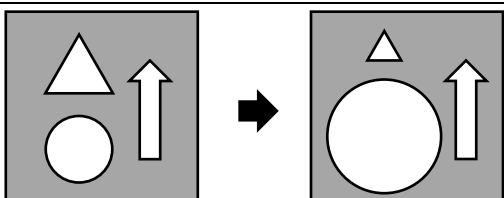
Note that the center image in the third row contains a question mark. This means that you should choose the answer that would fit into this center tile. Based on the previous two rows, we know that the center image should be the left image, flipped vertically. Now look at the shape before the blank shape. In your mind, apply the change you noted to this shape. Imagine what the image should look like. Then select it from the answer options.

Option “b” is the answer option that presents the left image, flipped up and down, and thus correctly completes the presented pattern. Option “b” is correct.

Correct answer: B

VISUALIZATION TIPS

With visualization items, you should start small. Find the change that occurs from the first shape in the pattern to the next. Next, find the change that occurs for the next set of shapes. Some possible patterns to look for include: rotation, flipping horizontally (left to right) or vertically (up and down), changes in shape, shifts in position, and changes in size. The following table presents examples of each of these types of change.

Type of Change	Example
Rotation	
Flipping horizontally (left to right)	
Flipping vertically (up and down)	
Change in shape	
Shift in position	
Change in size	

For some items, you will find that the pattern moves from left to right from one shape to the next. For other items, the pattern will move up and down through the image. Before trying to identify the right answer, first make sure you have correctly found the pattern within the image.

A common mistake is to not pay close enough attention to the differences between answer options. Skimming the answer options may save time and eliminate incorrect options. However, you may miss small differences. When the wrong strategy is used, people often fail to notice the small differences that identify which answer options are wrong.

To improve your visualization and ultimately perform at your best on the SAELFE, you should refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

SPATIAL ORIENTATION

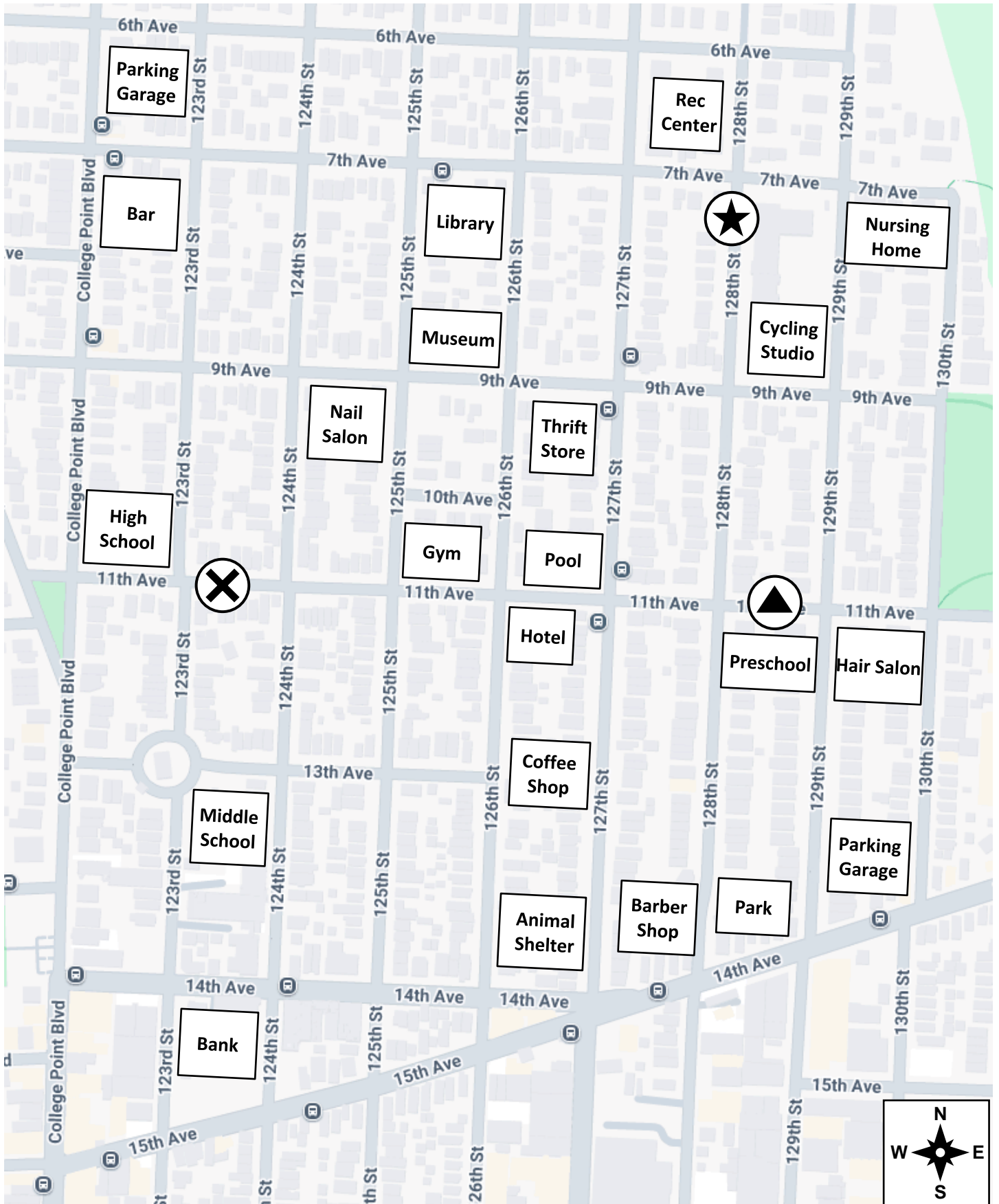
Spatial orientation is the ability to understand how to navigate within spaces or how to get from one point to another. This ability involves imagining yourself at a certain location and orientating yourself to the direction you would move to get to another location. It also involves knowing your location in relation to the environment or knowing where other objects are in relation to you.

Firefighters require this ability to travel from their current location to an emergency scene and also to navigate in and out of a building under duress (e.g., structure fires). Firefighters also use this ability when they have to reach a destination in a community. They have to be able to visualize where they are in relation to their destination.

The following question will allow you to assess your spatial orientation ability, identify any areas of weakness, and learn the proper method for solving this type of question.

SAMPLE QUESTION 7

Please use the map below to answer Sample Question 7.



7 You start at the star on the map. You drive the following route:

- 1) head south on 128th St.,**
- 2) turn right onto 9th Ave.,**
- 3) turn left onto 126th St.,**
- 4) turn right onto 11th Ave., then**
- 5) stop at the first intersection.**

Which of the following statements is true?

- a. The preschool is on your right.
- b. The pool is in front of you.
- c. The hotel is on your right.
- d. The gym is on your right.

Discussion

This question measures spatial orientation, or your ability to understand how to navigate within spaces or how to get from one point to another.

In order to answer this question, you will need to familiarize yourself with the map. Notice that there is a directional compass on the bottom right-hand side of the map. On the following page, you will find a map with the route from the question traced out and with the locations from the answer options labeled.

In referencing the question, you should imagine you are currently on 128th St. An indicator has already been placed on the map for you, so you know where you will begin. Additionally, you should place an indicator at each of the locations from the answer options (blue dots labeled “a”-“d” on the map), so you know the points that you must compare to determine which answer option is true in relation to where you end up.



The most effective method for approaching this type of question is to first trace the path that is indicated in the question. This path is traced in yellow on the map. This route will take you from the beginning point on 128th St to the end point on 11th Ave. You should place an indicator at this end point on the map (yellow “x” above). Keep in mind the direction that you are facing and traveling in when tracing this route. When you reach your first turn onto 9th Ave, you are facing south.

To turn right onto 9th Ave, you must trace the route to the left on the map because the perspective of the individual “inside” the map is opposite of your perspective of the map in its current orientation. You will need to be mindful of the orientation of the map and the direction you are traveling in throughout the scenario.

You should now look at the end point (yellow “x”) in relation to each of the locations you marked on the map. In doing so, you will see that option “d,” “the gym is on your right,” is the only answer option that is factual. The preschool, pool, and hotel are all behind your final location. Therefore, option “d” is the correct answer.

Correct answer: D

SPATIAL ORIENTATION TIPS

The most common mistakes on spatial orientation questions have to do with improperly orienting yourself. First, you must understand where north, south, east and west are based on the map you are viewing. You also need to be sure that you consider the perspective of an individual who is “inside” the map (i.e., imagine you are actually driving a car and following these directions). This will allow you to make correct judgments about whether a turn is left or right, east or west, or north or south. Remember to carefully review the map before reading the questions as this will help you better relate to the question.

To practice your spatial orientation ability, you can print out a map of your city. Choose a starting point and an ending point, and practice writing out directions to get from one point to the next. You can also practice identifying where businesses, restaurants, and community buildings are in relation to your ending points. Doing this will allow you to familiarize yourself with the cardinal directions, and you will gain practice mapping out routes of travel.

To improve your spatial orientation and ultimately perform at your best on the SAELFE, you should also refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

NUMBER FACILITY

Number facility is the ability to add, subtract, multiply, or divide quickly and correctly. Firefighters use number facility on the job to perform calculations related to things like water pressure, flow rates, medication administration, and fire dynamics. They must be able to make quick mental math calculations in high-pressure situations. Therefore, a basic understanding of how to use mathematical formulas to perform calculations is important (i.e., understanding the order of operations in which you should perform calculations within a formula).

The following questions will allow you to assess your numeric facility, identify any areas of weakness, and learn the proper method for solving this type of question. You will not be able to use a calculator on the examination, but you can take notes in the exam booklet. Therefore, you should attempt to answer the questions below by hand and not with a calculator.

SAMPLE QUESTIONS 8-10

Please solve for the question mark in the following equations.

8. If **L1** = 10 feet, **L2** = 2 feet, **L3** = 3 feet, **L4** = 7 feet, **L5** = 9 feet, and **L6** = 4 feet, then

$$\mathbf{L1 + L2 + L3 + L4 + L5 + L6 = ?}$$

- a. 33 feet
- b. 35 feet
- c. 45 feet
- d. 54 feet

9. If **C** = .5, **Q** = 250, and **L** = 100, then

$$\mathbf{C * \left(\frac{Q}{100} \right) * 2 * \left(\frac{L}{100} \right) = ?}$$

- a. 0.15
- b. 2.5
- c. 15
- d. 25

10. If **r** = 4, then

$$\mathbf{2.14 * r^2 = ?}$$

- a. 6.14
- b. 8.56
- c. 17.12
- d. 34.24

Discussion

These questions measure your number facility, or your ability to substitute given values into a formula and compute the correct answer. In order to do this, you have to be able to correctly apply mathematical operations like addition, subtraction, multiplication, and division. You will also need to know the appropriate order of operations to use, as sometimes it will be necessary to apply more than one operation to solve the problem. The conventional order of operations used in mathematics is as follows:

1. Parentheses
2. Exponents
3. Multiplication and division
4. Addition and subtraction.

This means that to solve a mathematical equation, you should first calculate any section of the equation that is within parentheses. Next, you should calculate any expressions in the equation containing exponents. Then, you should apply any multiplication or division which appears in the formula from left to right. Finally, you should apply any addition or subtraction in the formula from left to right.

The first strategy you should use when responding to number facility items is to plug the given values into the formula. For Sample Question 8, plugging the values for L1, L2, L3, L4, L5, and L6 into the formula produces the following equation:

$$10 + 2 + 3 + 7 + 9 + 4 = ?$$

Next, you should determine which mathematical operations are required to solve the equation. In this case, the only operation used is addition. The “+” signs within the equation indicate that addition should be used. Therefore, you do not need to consider the order of operations to use for this problem. You simply need to add the six numbers together from left to right to solve for the question mark.

$$\begin{array}{l}
 10 + 2 = 12 \\
 \swarrow \\
 12 + 3 = 15 \\
 \swarrow \\
 15 + 7 = 22 \\
 \swarrow \\
 22 + 9 = 31 \\
 \swarrow \\
 31 + 4 = 35
 \end{array}$$

The correct answer to Sample Question 8 is option “b.”

Sample Question 8 correct answer: B

Next, look at Sample Question 9. Again, the first step should be to plug the given values into the formula. When we plug the values for C, Q, and L into the formula, we get the following equation:

$$.5 * \left(\frac{250}{100} \right) * 2 * \left(\frac{100}{100} \right) = ?$$

The next step is to determine which mathematical operations are required to solve the equation. The “*” symbols in the equation indicate that multiplication should be used. The horizontal lines separating a top number from a bottom number (e.g., in $\frac{250}{100}$ and $\frac{100}{100}$) indicate that division should be used. You should also note that there are two sets of parentheses in the equation. Based on the order of operations, you should first solve the expressions with the parentheses. 250 divided by 100 = 2.5. 100 divided by 100 = 1. Plugging these results into the equation gives us the following:

$$.5 * 2.5 * 2 * 1 = ?$$

Now that multiplication is the only operation left, you can simply multiply the four numbers together from left to right to solve for the question mark.

$$\begin{array}{l}
 .5 * 2.5 = 1.25 \\
 \swarrow \\
 1.25 * 2 = 2.5 \\
 \swarrow \\
 2.5 * 1 = 2.5
 \end{array}$$

The correct answer to Sample Question 2 is option “b.”

Sample Question 9 correct answer: B

Finally, look at Sample Question 10. First, plug the given value into the formula. When we plug in the value for r , we get the following equation:

$$2.14 * 4^2 = ?$$

The next step is to determine which mathematical operations are required to solve the equation. The “*” symbol in the equation indicates that multiplication should be used. Further, the small floating number “2” after the 4 in the equation is an exponent. Based on the order of operations, you should evaluate the exponent in the equation before applying the multiplication. An exponent of a number shows how many times a number is multiplied by itself, so in this equation, 4^2 means 4 is multiplied two times by itself:

$$4^2 = 4 * 4 = 16$$

Plugging the value for 4^2 into the equation gives us:

$$2.14 * 16 = ?$$

Now that multiplication is the only operation left, you can simply multiply the two numbers together to solve for the question mark:

$$2.14 * 16 = 34.24$$

If multiplying by a decimal (i.e., 2.14) is too difficult for you to do in your head or by hand, you can simplify by multiplying by 2 instead and then choosing the closest answer option. $2 * 16 = 32$. Because you reduced the value in your equation by .14, the correct answer will be slightly larger than 32. The only answer option that is slightly larger than 32 is option “d.” Therefore, it must be the correct answer.

The correct answer to Sample Question 10 is option “d.”

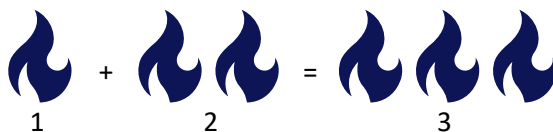
Sample Question 10 correct answer: D

NUMBER FACILITY TIPS

For all number facility questions on the examination, you will be asked to solve an equation by plugging values into a given formula. In order to answer the questions correctly, you must understand how to apply basic mathematical operations like addition, subtraction, multiplication, division, exponentiation, and square roots. Remember, you will not be allowed to use a calculator so be sure you are comfortable with doing math by hand. Following is a brief summary of each of these basic operations. This list is not intended to be exhaustive, but rather to communicate the basic operations with which you should be familiar.

Addition

- Addition is written using a “+” sign between numbers.
- The addition of numbers results in the total amount, or sum, of those values combined.
- When there are more than two numbers to add, the order in which addition is performed does not matter. For example, $2 + 3 + 5 = 10$ and $5 + 2 + 3 = 10$.
- Example:


$$1 + 2 = 3$$

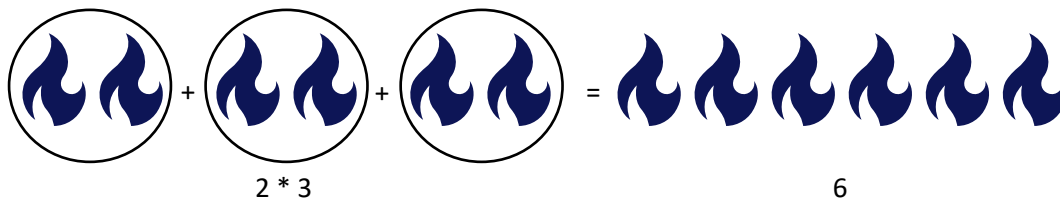
Subtraction

- Subtraction is written using a “-” sign between numbers.
- Subtraction takes away one number from another number, resulting in a difference.
- When there are more than two numbers to subtract, the order in which subtraction is performed does matter. For example, $6 - 1 - 2 = 3$, but $2 - 1 - 6 = -5$.
- Example:



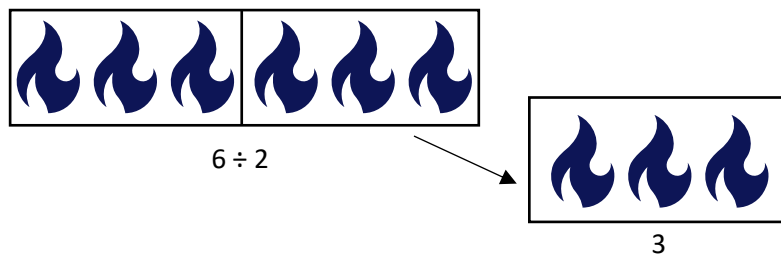
Multiplication

- Multiplication is written using a “*” or “x” sign between numbers.
- The multiplication of numbers can be thought of as repeated addition to produce a product; for example, the expression $2 * 3$ can be solved by adding 3 copies of 2 together.
- When there are more than two numbers to multiply, the order in which multiplication is performed does not matter. For example, $2 * 3 * 5 = 30$ and $5 * 2 * 3 = 30$.
- Example:



Division

- Division is written using a “/” or “÷” sign between numbers. It can also be written by putting a top number (numerator) over a bottom number (denominator) in a fraction (e.g., $\frac{2}{3}$ is the same as $2 \div 3$ and $2/3$).
- The division of numbers can be thought of as calculating the number of times one number is contained within another; for example, the expression $\frac{10}{5}$ can be thought of as, “how many times does 5 go into 10?”
- When there are more than two numbers to divide, the order in which division is performed does matter. For example, $(27 \div 9) \div 3 = 1$ and $27 \div (9 \div 3) = 9$.
- Example:



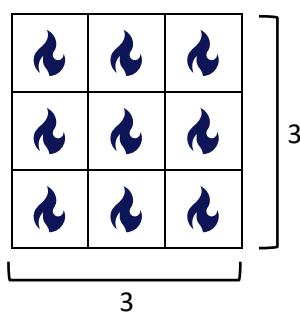
Exponentiation

- Exponents are written as a superscript (small floating) number next to another number. For example, in 4^3 , 3 is an exponent.
- The exponent of a number shows how many times a number is multiplied by itself. For example, 4^3 means 4 is multiplied three times by itself ($4 * 4 * 4$). 10^2 means 10 is multiplied by itself twice ($10 * 10$).
- Example:

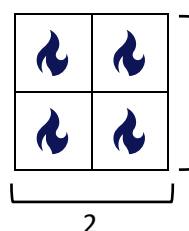
$$3^2 = \underbrace{(\text{3 flames})}_{3} + \underbrace{(\text{3 flames})}_{3} = \underbrace{(\text{9 flames})}_{9}$$

Square Roots

- You should find the square root of a number when the number is written under the square root ($\sqrt{}$) symbol. For example, $\sqrt{9}$ means you should find the square root of 9.
- The square root of a number is a number that, when multiplied by itself (or raised to an exponent of 2), gives the number in the equation. For example, $\sqrt{9} = 3$ because $3^2 = 9$.
- Examples:



$$\begin{aligned}\sqrt{9} &= 3, \\ \text{since } 9 &= 3 * 3, \\ \text{or } 3^2\end{aligned}$$



$$\begin{aligned}\sqrt{4} &= 2, \\ \text{since } 4 &= 2 * 2, \\ \text{or } 2^2\end{aligned}$$

The most common error you are likely to make in responding to a number facility question is to use the incorrect order of operations to solve the equation. The order of operations tells you the sequence in which you should solve an equation with multiple operations. If you have an equation where all the operations are the same (e.g., only addition, only subtraction, etc.), the correct way to solve it would be from left to right. However, for equations containing multiple operations, the conventional order of operations to be used is as follows:

- Parentheses.** First, solve any parts of the equation that are in parentheses. If there are multiple groups of parentheses within each other, you should work from the inside to the outside.
- Exponents.** Second, solve any exponential expressions in the equation.
- Multiplication and Division.** Third, moving from left to right in the equation, multiply and/or divide.
- Addition and Subtraction.** Finally, moving from left to right in the equation, add and/or subtract.

An easy way to remember the correct order of operations is by using the acronym “PEMDAS.” Each letter in PEMDAS represents one of the steps outlined above (Parentheses, Exponents, Multiplication, Division, Addition, and Subtraction).

All number facility questions on the examination will be highly similar to the questions you see here. To improve your number facility and ultimately perform at your best on the SAELFE, you should refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

WRITTEN EXPRESSION (WRITING)

Written expression (writing) is the ability to communicate your thoughts using the English language in a way that other people will understand. It also reflects your knowledge of writing with respect to word usage, spelling, and punctuation.

Firefighters engage in written communication in a multitude of ways; therefore, firefighters must be able to communicate intelligently and professionally via the written word. It is necessary to understand how to spell

COGNITIVE ABILITY MEASURE

common words, properly use and pair parts of language (e.g., nouns, verbs, articles, etc.), punctuate sentences properly, and compose meaningful sentences.

Questions on the test will assess your writing ability using one format. You will be asked to select an answer option that correctly completes a given sentence (see Sample Question 11). The following question will allow you to assess your writing ability, identify any areas of weakness, and learn the proper method for solving this type of question.

SAMPLE QUESTION 11

For Sample Question 11, choose the answer option that correctly completes the sentence.

11. As you become more tenured, you will _____ more time off.

- a. aquire
- b. adquire
- c. acquire
- d. acquier

Discussion

This question measures your ability to identify proper spelling. To the extent that you understand how to spell appropriately, you should be able to recognize which answer option correctly completes the sentence provided.

In order to answer this question, you should first read the sentence and answer options and see if the correct answer noticeably stands out to you. If so, try inserting what you believe to be the correct spelling into the sentence and re-reading it to ensure that it is accurate. If you cannot immediately identify the correct answer, carefully read through the answer options to identify which ones contain errors. Move through each option using this method. Make sure you can come up with a spelling rule that is clearly broken in each instance. Through this process of elimination, you should end up with only the correct answer remaining.

In this question, the only correct answer is “c.” Specifically, the word “acquire” is spelled correctly. Each of the other answer options presents misspellings of the word “acquire.” By utilizing your knowledge of basic spelling, you can conclude the correct answer is option “c.”

Correct answer: C

WRITING TIPS

For the writing items on the examination like Sample Question 11, you will be asked to identify the answer option that correctly completes a sentence. This type of question will require you to be familiar with common grammar, spelling, punctuation, and syntax rules. There are many rules that govern the use of the English language. It would be wise to consult a text that teaches high school-level (8th to 10th grade) grammar and style rules, or a writer’s style manual. Please note the examination will only ask questions about conventional and commonly-accepted practices. Style manuals often disagree on lesser grammar and style rules. Also, any misspelled words for which questions are asked will be commonly used words that the majority of individuals should be capable of spelling.

Following is a brief summary of common and important grammar and syntax rules. This list is not intended to be exhaustive, but rather to communicate common rules and errors with which you should be familiar.

COGNITIVE ABILITY MEASURE

Use of Apostrophes and Quotation Marks

- If you are trying to communicate the possessive form of a singular noun, generally you add “ ’s” to the word.
INCORRECT: The childs bike was stolen from her front yard.
CORRECT: The child’s bike was stolen from her front yard.
- If the noun is plural, generally, you add the apostrophe after the “s.”
INCORRECT: The twins’s parents allowed both of them to attend the party.
CORRECT: The twins’ parents allowed both of them to attend the party.
- The possessive form of “it” does not contain an apostrophe (the apostrophe is reserved for the contraction of “it is”).
INCORRECT: Sandra had to replace her radio after it’s speaker stopped working.
CORRECT: Sandra had to replace her radio after its speaker stopped working.
- Possessive pronouns (e.g., hers, yours) do not use apostrophes.
INCORRECT: Meghan is known for her landscaping skills. Her’s is the biggest garden on the block!
CORRECT: Meghan is known for her landscaping skills. Hers is the biggest garden on the block!
- When contracting words, the apostrophe is intended to take the place of the missing letter(s) (e.g., “it’s” for “it is,” “wouldn’t” for “would not”).
INCORRECT: Josh could’nt go to work today because he was feeling sick.
CORRECT: Josh couldn’t go to work today because he was feeling sick.
- Generally, a quote contained within a sentence is preceded by a comma outside the quotation marks and/or is followed by a comma inside the quotation marks.
INCORRECT: Mark said “I really hate when the air conditioner stops working.”
CORRECT: Mark said, “I really hate when the air conditioner stops working.”

OR

- INCORRECT:** “I really hate when the air conditioner stops working” Mark said.
CORRECT: “I really hate when the air conditioner stops working,” Mark said.

Subject-Verb Agreement and Verb Tense Agreement

- The number (singular or plural) of the subject dictates the number of the verb.
INCORRECT: The girls runs to school.
CORRECT: The girls run to school.
OR
INCORRECT: The dog chase the bus.
CORRECT: The dog chases the bus.
- When the subject is a pronoun, the pronoun number and verb number must agree.
INCORRECT: People stare at him as he walk through the neighborhood.
CORRECT: People stare at him as he walks through the neighborhood.
- The verb tense (present, past, future) should remain consistent within a summary or description.
INCORRECT: Austin left his house to go to work. He gets in his car and started driving down the road. As he was stopped at an intersection, he heard brakes squealing and sees a white truck run the red light. It crashed into a blue sedan and flees the scene.
CORRECT: Austin left his house to go to work. He got in his car and started driving down the road. As he was stopped at an intersection, he heard brakes squealing and saw a white truck run the red light. It crashed into a blue sedan and fled the scene.

COGNITIVE ABILITY MEASURE

Commonly Misused Words

- Numerous words are commonly confused or misused including, whether/weather, affect/effect, then/than, their/there/they're and to/too.

INCORRECT: Before approaching the door, Firefighter Butler debated weather or not he should call for backup.

CORRECT: Before approaching the door, Firefighter Butler debated whether or not he should call for backup.

OR

INCORRECT: Battalion Chief Cohen was called too the scene of the large fire.

CORRECT: Battalion Chief Cohen was called to the scene of the large fire.

OR

INCORRECT: Firefighter Griffin and Hubbard went to they're favorite restaurant after getting off work.

CORRECT: Firefighter Griffin and Hubbard went to their favorite restaurant after getting off work.

To improve your writing ability and ultimately perform at your best on the SAELFE, you should also refer to *Additional Resources for Improving Your Cognitive Abilities* at the end of the *Cognitive Ability Measure* section.

COGNITIVE ABILITY MEASURE

ADDITIONAL RESOURCES FOR IMPROVING YOUR COGNITIVE ABILITIES

Your performance on the cognitive ability section of the examination can be improved by practicing the specific cognitive abilities that are measured by the exam. For more practice with these abilities, you should consider the following resources:

- **SAELFE PRACTICE TESTS.** The *SAELFE Practice Tests* are highly similar to the actual SAELFE. For the best chance at improving your cognitive abilities and ultimately performing at your best on the SAELFE, you should complete the *Practice Tests*.
- **GRAMMAR, SPELLING, VOCABULARY, MATHEMATICAL WORKBOOKS.** For additional resources to improve your writing (grammar and vocabulary), consider referencing a study aid that focuses on high-school level (8th to 10th grade) grammar, spelling, and/or vocabulary. Additionally, utilize similar resources to improve your mathematical skills. Appropriate study aids for the SAELFE would be tailored to individuals studying for high school or for the GED test.

BEHAVIORAL-ORIENTATION MEASURE

The behavioral-orientation section of the examination is significantly different from the cognitive ability section in terms of design and requirements for your responses. It is important to note that the statements in this section are not scored in terms of correct or incorrect answers. These items are presented as a series of statements for you to respond to by marking the answer that best fits your beliefs. You will determine your level of agreement with a variety of statements using the five-point agreement scale shown below.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

When answering questions in this section, you should briefly consider the statement that is presented and then provide a response that corresponds with your initial reaction regarding your level of agreement or disagreement. Your first reaction is usually the most candid and accurate response.

SAMPLE QUESTIONS

This section contains a series of statements that you must evaluate based on your personal opinion. Read each statement and then provide a response based on the agreement scale above.

1. I am sometimes nervous around friends whom I have not seen for a long time.
2. I enjoy trying to make others feel comfortable in new situations.
3. When I am uncertain of how to do a task, I will usually ask for clarity.

Discussion

You may agree with item 1. You would thus assign answer option “2” to item 1. You may disagree with item 2. You would thus assign answer option “4” to item 2. Finally, you may strongly disagree with item 3. You would thus assign answer option “5” to item 3.

BEHAVIORAL-ORIENTATION SECTION TIPS

Respond to each statement candidly according to how much you agree or disagree with it. Your response should be an indication of how you feel about the statement that is presented. You should respond honestly to each statement. A good guideline for answering these types of items is to put down the first response that feels right. Overanalyzing the statement or looking for hidden meaning can often cause you to misunderstand the statement and respond in a manner that does not reflect your true behavioral attributes.

RESPONDING HONESTLY

This section of the examination has been developed so that responding in a dishonest manner to “look good” or to “game” the test will result in lower scores. For example, in Part 1 of this section, strategies such as using only extreme parts of the scale (using only “1s” and “5s”) or other “patterns” may be flagged by the examination as dishonest responses, and may result in lower scores. We caution all test takers to avoid any such strategies. Any information, resources or testimonials that you may encounter suggesting that these types of strategies are successful are ill-informed. Following this ill-informed advice will likely result in the lowering of your score, impacting your chance of passing the SAELFE. Responding honestly according to your personal thoughts, feelings, or opinions is the best strategy.

GENERAL TEST-TAKING TIPS

TIPS FOR THE DAY OF THE EXAMINATION

- **Your physical well-being.** Get a good night's sleep before the exam. Try to ensure that you are in the best possible condition both physically and mentally on the day of the exam.
- **Arrive early.** Make all necessary arrangements to ensure that you arrive early at the test site. You may need to make advance arrangements for such things as childcare and a ride to the test site. It would also be wise to anticipate traffic delays in traveling to the test site and to allocate extra travel time to ensure an early arrival even with delays. Give yourself ample time to settle in at the test site. If you arrive late, you may not be admitted to the test.
- **Confidence.** The more confident you are in your abilities, the more likely you are to do well on the exam. Try to stay focused so that you don't end up reading sentences and answer choices over and over again. You want to take control of the exam by feeling confident in your skills. Try to relax but concentrate on the exam you are about to take.
- **Attitude.** This exam is an opportunity for you to show your skills and abilities, and a positive attitude can have an impact on increasing your test score. There are a few ways to fine-tune your attitude about taking this exam:
 - Look at this exam as a challenge but try not to get "stressed out" by thinking about it too much.
 - Remember that by using this study guide and practicing your strategies, you can be more prepared for the exam.

GENERAL STRATEGIES FOR TAKING THE EXAMINATION

- **Listen carefully.** The exam administrator will provide you with complete instructions for taking the exam. Be sure that you pay close attention to all test instructions. It is extremely important that you completely understand the directions before the exam begins.
- **Ask questions.** If there are instructions that you do not understand or if something is not clear, please feel free to ask the exam administrator any questions that you may have before the exam begins.
- **Keep track of time.** It is important that you keep track of your time so that you are able to pace yourself throughout the exam. You do not want to run out of time and have unanswered questions. Since the score on the cognitive portion of your exam will be based on the total number of correct answers, you will want to work both quickly and efficiently. It is also important that you keep track of time so that you are able to allot a few minutes to guess on unanswered questions at the end of the exam.
- **Remain calm.** It is important that you remain calm throughout this exam so that you are able to work most effectively. You can't allow yourself to become nervous or confused by a few difficult or challenging questions. There are going to be times when you are not going to know the answer, and neither will other individuals taking the exam. If you believe that you have not done well on any particular type of question, try to remain calm and focus on doing your best for the rest of the exam.
- **Read each question carefully.** Be sure that you understand what the question requires of you.
- **Read for meaning.** Don't get stuck on words or sentences you do not understand. You may be able to get the main idea from a sentence or paragraph without understanding the individual words or the individual sentences.
- **Try to answer the question correctly before you look at the answers given.** If you know the answer, compare it to the available choices and pick the choice closest in meaning to the answer you have in mind.
- **Answer easy questions first.** It is important that you answer the easy questions first on this exam. By doing so, you will afford yourself more time to spend on the difficult questions if necessary. Seek out questions you can answer. If there are particular kinds of questions that you feel most comfortable with, answer those questions first. For example, if you are particularly good at reading comprehension, find those items first and complete them.
- **Don't waste time on questions you can't answer.** If you believe that you are not able to answer a question, then skip it. It is better to skip a difficult question than to spend a lot of time on it and not be able to complete other exam questions.

GENERAL TEST-TAKING TIPS

- **Use a process of elimination.** If a situation presents itself where you are unable to answer a question, use a process of elimination to narrow your options. First, eliminate any answers that are clearly wrong. Then determine how you feel about the remaining choices.
- **Guessing.** It is important that you try to get as many points as possible on the examination. Points are given for correct answers only. Because there is no penalty (i.e., points deducted) for guessing or incorrect answers on this exam, you should try to answer every question. By leaving yourself enough time at the end of the test to answer unanswered questions using your “best guess,” you will increase the possibility of getting a few of them correct.
- **Extra time.** If you finish the exam before the time period is over, review your answers and make any changes that are necessary.

RESPONDING TO QUESTIONS

For the cognitive ability section of the test, your score will be based on the total number of questions you answer correctly. No additional points are deducted for marking incorrect responses; therefore, it is in your best interest to answer all questions on the exam. Your failure to answer all questions could have a detrimental effect on your test score. It is advisable to make an educated guess on a test question rather than leaving the question blank.

If you are having trouble identifying the correct answer for a question, it may be beneficial to skip the question and come back to it as time allows. This will keep you from wasting valuable time on questions that you are less likely to respond to accurately.

QUICK TIPS FOR ANSWERING MULTIPLE-CHOICE QUESTIONS

- Read the entire question carefully and try to answer it without referring to the answer choices.
- Look for any key words in the question that may help you select the correct answer from among the choices. Some common key words are: many, most, least, less, more, good, best, advantage, disadvantage, first, last, never, always, any, not, except, false, and true.
- Always read all of the possible answer alternatives carefully before jumping to the conclusion that a particular one must be the best.
- Use the process of elimination if the correct answer does not immediately occur to you. Eliminate obviously wrong answers and narrow your choice to the ones that directly answer the question. Then select the answer that most exactly answers the question.
- Do not be influenced by the length of the answer choices. The longest answer is not necessarily correct.
- Do not select an answer choice just because it includes technical language. Answer choices using technical terminology may be included in order to see whether you know the difference between what “looks right” and what is actually right.
- Determine the best answer using only the information supplied in the question, without making unwarranted assumptions. The correct answer is the one that works best for the situation described.

STRATEGIES FOR ANALYZING AND AVOIDING ERRORS

Four common causes for choosing incorrect responses are presented to you below, along with suggestions for avoiding these errors. Reading through this section carefully can help you identify and correct any major weaknesses in your test-taking behavior.

GENERAL TEST-TAKING TIPS

1) TIME MANAGEMENT AND GUESSING ERRORS.

Reason: You may have missed a question because you skipped it and failed to come back to it later.

Suggestion: Be sure you remember to go back to skipped questions before the end of the exam period.

Reason: You may have lost track of the time and been unaware that the exam period was about to end before you could answer any remaining unanswered questions.

Suggestion: Be sure to check the exam timer often (time goes by quickly during an exam) so that you can keep track of how much time you have left. Leave five minutes at the end of the exam so that you are able to go back to any unanswered questions and complete them.

Reason: You may have been forced to make guesses for questions at the end of the exam because you spent too much time working on difficult questions rather than skipping them and saving them for later.

Suggestion: If you did skip difficult questions, it may be because you failed to narrow down the number of alternatives in the question.

2) MISREADING A QUESTION OR ANSWER.

Reason: This may occur because you overlooked a key word or phrase.

Suggestion: When choosing an answer, pay attention to key words and phrases that stand out. Once you have found the key words and phrases, check the details of the possible answers with the details you found, one by one. Always keep in mind that you are looking for the best possible answer with the most accurate details.

3) NOT KNOWING THE MEANING OF KEY WORDS.

Reason: This is a problem with vocabulary.

Suggestion: When you come to an unfamiliar word, reread the sentence to determine the general, overall meaning of the sentence. This is known as "reading for meaning." The meaning of the unfamiliar word should become clearer as you begin to understand the phrases and ideas that surround it.

4) ANSWERS THAT "LOOK" GOOD.

Reason: An incorrect answer may contain an exact phrase from the original question.

Suggestion: Beware of answers containing exact words or phrases from the question.

Reason: An incorrect answer may overstate information that was presented in the question. For example, if the question says, "Some incidents...", an incorrect answer may say, "All incidents..."

Suggestion: Stick strictly to the facts described in the exam question itself. Don't be drawn to answers that stretch or exaggerate these facts or rules. This is the time to watch out for words such as "only," "never," "always," "whenever," "all," etc.

FINAL TIPS

BEFORE THE TEST

- Prepare for the exam. You will increase your chances of obtaining your best score if you spend some time preparing for the exam. This includes reading this study guide and finding out as much as possible about the exam ahead of time, trying to avoid becoming overly anxious about the exam, and using good test-taking strategies.

ON THE DAY OF THE TEST

- Allow yourself enough time for traveling to the test site and locating your test room.
- Do **NOT** bring any device with a typewriter keyboard, such as a "Spell Checker," "Personal Digital Assistant (PDA)," "Address Book," "Language Translator," "Dictionary," or other, similar device to the test site.

GENERAL TEST-TAKING TIPS

- Do **NOT** bring cell phones, beepers, headphones, or any electronic or other communication devices to the test site. The use of such devices at the test site in the test room, hallways, restrooms, building, grounds, or other areas could result in your disqualification.
- Do **NOT** bring books or reference materials to the test site.
- Do **NOT** bring this guide or sample test materials to the test site.

DURING THE TEST

- Read and follow all directions.
- Follow the test administrator's instructions; raise your hand if you have questions or need help.
- Keep track of the time and organize your work accordingly.
- Do not look at the work of other people in the room or you may be disqualified.

AFTER THE TEST

- Continue to observe test security prohibitions by not removing any test materials from the test room, by not reconstructing or reproducing test materials, and by not discussing the test.

COMMON SENSE SUGGESTIONS

- Get plenty of rest the night before.
- Dress comfortably, in layers, so you can adapt to the temperature in the testing room.
- Eat breakfast.
- If you are not sure where the test site is, get directions to the site before the test date.
- Leave yourself plenty of time to get to the test site just in case there is traffic, you have car trouble, transportation problems, etc.
- Your attitude and approach to the test will influence how well you perform. A positive attitude will help you do your best.

Good luck on the examination and in your firefighter career!



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