SAMPLE GED PRACTICE TEST

All sample GED Questions taken from the 2002 Test of General Educational Development: A Preview published by the GED Testing Service

This sample for self instructional purposes only. Actual GED questions vary. Remember you cannot take the official GED test online. For your local GED test center call 1-800-62-MY-GED.
Sample GED Test 1: Language Arts Writing, Part 1

Directions:

Choose the one best answer to each question. Some of the sentences may contain errors in organization, sentence structure, usage, or mechanics. A few of the sentences, however, may be correct as written.

Read the sentences carefully and then answer the questions based on the sentences you have just read.

For each question, choose the answer that would result in the most effective writing of the sentence or sentences.

Sample Business Document

Jonathan Quinn, Employment Director
Capital City Gardening Services
4120 Wisconsin Avenue, N.W.
Washington, DC 20036

Dear Mr. Quinn:

(1) I would like to apply for the landscape supervisor position advertised in the Sunday, April 30th edition of the Washington Post.
(2) My work experience and education combined with your need for an experienced landscape supervisor has resulted in a relationship that would profit both parties.
(3) In May, I graduated from Prince William Community College.
(4) Graduating with an Associate of Arts Degree in horticulture.
(5) My concentration within the program which was designing gardens and choosing the plants for particular soils and regions.
(6) In addition, I took a bunch of other tough courses in college that my uncle thought were really, really hard and which forced me to lose an awful lot of sleep.

(7) I have also had considerable experience in supervising.

(8) For several years, having worked with a local company, Burke Nursery and Garden Center, and had been responsible for supervising the four members of the planting staff.

(9) Our community know Capital City Gardening Services is a company that does excellent work and strives hard to meet the demands of its clients.

(10) As my references will attest, I am a diligent worker and have the respect of both my coworkers and my customers.

(11) I will be, as a landscape supervisor at your firm, able to put to use the skills and knowledge that I have obtained and continue the tradition you have established.

(12) I have included a copy of my resume detailing my principal interests education, and past work experience.

(13) Photographs of the landscape projects I have supervised as well as drawings of proposed projects are also included.

(14) The opportunities that this position provides and the many challenges that this position provides are things that I am excited about in regards to this position.

(15) Thank you for your consideration, I look forward to hearing from you.

Sincerely,
P. Jones
Sample Test Questions

Test 1: Language Arts Writing, Part I

1. Sentence 2: My work experience and education combined with your need for an experienced landscape supervisor has resulted in a relationship that would profit both parties.

What correction should be made to sentence 2?

(1) insert a comma after education
(2) change combined to combine
(3) change has resulted to would result
(4) replace profit with prophet
(5) replace parties with party’s.


Which is the best way to write the underlined portion of the text? If the original is the best way, choose option (1).

(1) College. Graduating
(2) College, I graduated
(3) College. A graduation
(4) College. Having graduated
(5) College with
3. Sentence 5: My concentration within the program which was designing gardens and choosing the appropriate plants for particular soils and regions.

Which is the best way to write the underlined portion of the text? If the original is the best way, choose option (1).

(1) which was designing gardens and choosing
(2) was designing gardens and choosing
(3) was designing gardens and to choose
(4) was to design gardens and choosing
(5) was designing gardens but also choosing

5. Sentence 6: In addition, I took a bunch of other tough courses in college that my uncle thought were really, really hard and which forced me to lose an awful lot of sleep.

Which revision should be made to sentence 6?

(1) move sentence 6 to follow sentence 1
(2) move sentence 6 to follow sentence 7
(3) move sentence 6 to follow sentence 9
(4) remove sentence 6
(5) no revision is necessary
5. Sentence 8: For several years having worked with a local company, Burke Garden Center, and have been responsible for supervising the four members of the planting staff.

*What correction should be made to sentence 8?*

(1) replace years having with years. I have  
(2) remove the comma after company  
(3) replace and having with also having  
(4) change have been to having been  
(5) no correction is necessary

6. Sentence 9: Our community know Capital City Gardening Services is a company that does excellent work and strives hard to meet the demands of its clients.

*What correction should be made to sentence 9?*

(1) change know to knows  
(2) change is to are  
(3) change does to do  
(4) change strives to strive  
(5) change its to it’s
7. Sentence 11: I will be, as a landscape supervisor at your firm, able to put to use the skills and knowledge that I have obtained from my professional career and education. 

If you rewrote sentence 11 beginning with 

As a landscape supervisor at you firm,

(1) and able I will be  
(2) I will be able  
(3) putting and using with ability  
(4) obtaining my professional career education  
(5) able to put to use I will be

8. Which sentence below would be most effective at the beginning of paragraph B?

(1) There are many companies in this community and Capital City Gardening Services is one of them.  
(2) A company such as yours is known for a lot of things, especially the beautiful fountain, great billboard, and large parking area.  
(3) Like carpet cleaning services, gardening services range in cost.  
(4) A company is only as good as its reputation.  
(5) Gosh, I don’t know where to begin when saying good things about your company.
9. Sentence 12: I have included a copy of my resume detailing my principal interests education, and past work experience.

What correction should be made to sentence 12?

(1) insert a comma after resume
(2) replace principal with principle
(3) insert a comma after interests
(4) replace past with passed
(5) no correction in necessary

10. Sentence 14: The opportunities that this position provides and the many challenges that this position provides are things that I am excited about in regards to this position.

The most effective revision of sentence 14 would begin with which group of words?

(1) The opportunities and challenges, in regards to being excited,
(2) This position with challenges and this position with opportunities
(3) Things of opportunities and things of challenges
(4) Things, opportunities, challenges, and position
(5) I am excited about the opportunities and challenges

11. Sentence 15: Thank you for your consideration, I look forward to hearing from you.

Which is the best way to write the underlined portion of the text? If the original is the best way, choose option (1).

(1) consideration, I look
(2) consideration, but I look
(3) consideration, and I look
(4) consideration, having looked
(5) consideration, in addition I look
12. Which revision would make the letter more effective?

Begin a new paragraph

(1) with sentence 3
(2) with sentence 5
(3) with sentence 8
(4) with sentence 10
(5) with sentence 13
Answers to Sample Language Arts Writing Questions

1. 3
2. 5
3. 2
4. 4
5. 1
6. 1
7. 2
8. 4
9. 3
10. 5
11. 3
12. 1
WRITING ESSAY GUIDELINES

Introduction – Paragraph One

Topic Sentence
State Your Position
Overview Main Points

The Body

Paragraph Two – Support for first main point
Paragraph Three – Support for second main point
Paragraph Four – Support for third main point

The Conclusion – Paragraph (Last Paragraph)

Restate Topic Sentence
Restate Your position
Conclude Your Essay
Test 1: Language Arts Writing, Part II

GED 2002 Essay Scoring Guide

GED scorers follow these guidelines in determining how to score your essay. Read and understand the different levels so that you can better include the factors that determine the highest levels. You will gain significant advantage if you write an effective essay. With a bit of planning and some practice writing sessions there is no reason that your essay cannot be scored a Level 4. Essays are expected to conform with the standards of Edited American English (EAE). These standards hold that the essay writer is able to edit materials for language usage errors in academic and real-life documents.

**Level 4** writing is *effective* because the writer presents a clearly focused main idea that addresses the prompt while controlling both the language and sentence structure. The response establishes a clear and logical organization and achieves coherent development with specific and relevant details and examples. Word choice is varied and precise, and there is consistent control of Edited American English (EAE), although a few minor errors may be present. As a result of these combined characteristics, the reader understands and easily follows the expression of ideas in the response.

**Level 3** writing is *adequate* because the writer uses the prompt to establish a main idea and generally controls both language and sentence structure. There is an identifiable organizational plan. The writer incorporates specific focused detail, but the development may be uneven. Word choice is appropriate, and the conventions of EAE are generally correct; the errors that are present do not interfere with comprehension. The reader of a Level 3 essay understands the writer’s ideas.
Level 2 writing is *marginal* because the writer addresses the prompt but may lose focus or provide few specific details. The response shows some evidence of an organizational plan and has some development, but it may be limited to a listing, repetition, or generalizations. There is a narrow range of word choice, sometimes including inappropriate selections, and control of sentence structure or the conventions of EAE may be inconsistent. As a result of these combined characteristics, the reader of a Level 2 essay occasionally has difficulty understanding or following the expression of ideas.

Level 1 writing is *inadequate* because the writer has little or no success in establishing and developing a focus. The writer fails to organize ideas or provides little development; the response usually lacks details or examples or presents irrelevant information. There may be minimal, if any, control of sentence structure and the conventions of EAE, or word choice may be ineffective and often inappropriate. The reader of the Level 1 essay has difficulty identifying or following the writer’s ideas.
GED ESSAY

After you have studied the factors in determining the Level 1-4 essay guidelines, write your essay on the following topic:

If you could make one positive change to your daily life, what would that change be?

Be sure to include specific examples and details.

Read through your essay twice and determine which level your essay may have been scored.

If you wish to be scored on your essay, email it to myged@ymail.com

REMEMBER TO SPELL AND GRAMMER CHECK YOUR ESSAY
This passage was adapted from a variety of general sources and is considered an excellent World History topic because it is fundamental to both U.S. and Canadian high school curriculum and experience, and examines events and concepts that relate to many peoples all over the world.

Questions 1 to 5 are based on the following interpretation of history.

The history of the world is filled with stories of people migrating. Migration is the movement of people from one place to another as they seek a new home. People who migrate are called immigrants. Immigrants decide to leave their homes because of “push” and “pull” forces. Famine, over population, few resources, war, and religious and political persecution “push” immigrants to move to another country. Hopes for employment and a better life “pull” immigrants to new places.

Millions of people have migrated to North America since the 1600s. The Spanish, French, English, and Dutch were the first European settlers to establish colonies. They settled in lands originally populated by native people from Asia. These Europeans came to North America in search of gold, religious converts, and new places to live and practice their beliefs. A large number of people from Africa were driven from their homes, at this time, to be enslaved to work in colonies in North America.

Throughout the 19th century, immigrants looking for employment came to North America from Japan, China, and southeastern Europe. In the 1970s and 1980s, Southeast Asians, Latin Americans, and Caribbeans migrated to North America. Many of these immigrants fled from war-torn countries, political persecution, and economic difficulties.
1. Which of the following observations about migration to North America is made in the presented interpretation?

(1) Immigrants no longer come to North America.
(2) Most immigrants were forced to migrate.
(3) Migration was not worth the trouble.
(4) Most immigrants came from similar cultures.
(5) Immigrants came from many countries.

2. The government of a country may restrict the number of immigrants allowed to enter that country. These restrictions on immigration are most likely based on what belief?

(1) An economy can support unlimited numbers of people.
(2) The “push” factors justify most immigration.
(3) Immigrants enrich the culture of a country.
(4) A country has a limited number of jobs and services.
(5) A government should not interfere with the migration of people.

3. Which is an opinion rather than a fact about immigrants to North America related to the passage?

Immigrants
(1) traveled long distances to find a better life
(2) migrated to find employment
(3) learned to live in a foreign culture
(4) escaped from political persecution
(5) found a better life
4. Why did most Southeast Asian immigrants to North America during the 1970s and 1980s leave their countries?

Because they were
(1) refugees fleeing from war in their countries
(2) people escaping from natural disasters
(3) wealthy business owners looking for new markets
(4) members of religious groups hoping to spread their beliefs
(5) people happy with conditions in their countries

5. Does the information in the interpretation presented support the fact that the “push- pull” theory of immigration describes why many groups of people immigrated to North America?

(1) No. Some groups forced Native Americans to give up their lands in North America.
(2) Yes. Asians, Europeans, and Africans were attracted to North America or forced to settle there.
(3) No. Famine and war caused many Europeans to emigrate from North America or forced to settle there.
(4) Yes. Many groups decided to return to their homelands after traveling to North America.
(5) No. The theory applies to a few immigrant groups, not most who settled in North America.
U.S. Geography

Sample Test Questions

This general map of agricultural regions illustrates an important topic in U.S. high school curriculum – the spatial organizations of key economic activities in a free enterprise economy.

Questions 10 and 11 refer to the following map of agricultural regions in the United States.

6. In which U.S. region would manufacturers be most likely to build cereal factories if they wanted to pay the lowest fuel costs for transportation of grain to the factories?

(1) Rocky Mountain area
(2) Southwest
(3) New England
(4) Atlantic Coast
(5) Midwest
7. The United States has enjoyed a high standard of living for many years.

Which of the following statements best helps to explain this historical development in the United States AND is supported by information on the map?

(1) Different climates and soils produce a wide variety and surplus of crops.
(2) The United States uses the Great Lakes for transporting farm products.
(3) Some regions of the country receive more rain than others.
(4) The Northeastern states supply the country with a surplus of grains.
(5) The United States is a large country with plenty of good land.
Answers and Explanations for Social Studies Questions

1. The answer is (5). This comprehension question requires the examinee to restate an important idea from the passage about immigrants that came to North America. The passage gives no evidence for (1); gives some evidence of forced migration but does not apply it to all groups (2); gives insufficient evidence for this opinion (3); and clearly refutes (4).

2. The answer is (4). This application question requires the examinee to focus on a universal immigration issue that is related to the passage but newly introduced by the question. It is a general case of a concrete situation, that is the regulation of immigration to a country that faces all countries. The concept of scarcity (4) is the only logical reason for restrictions among the alternatives offered.

3. The answer is (5). (1), (2), (3), and (4) were all facts stated or implied in the passage. (5) is what many immigrants have hoped for, but whether they have found a better life remains unknown.

4. The answer is (1). This analysis question requires the examinee to know the reason for a group’s migration to North America. Information in the passage implies, but does not directly explain, the reason. Prior knowledge is required to choose the answer when distinguishing between plausible alternatives (2), (3), and (4). (5) does not qualify as an accurate reason for humans to migrate.
5. The answer is (2). This evaluation question requires the examinee to determine if the information in the passage provides sufficient detail to support the ideas that the “push-pull” theory of immigration does apply to the history of North America. The passage describes how most immigrants to the continent, including Asians, Europeans, and Africans, were either “pushed” or “pulled” to immigrate for a variety of reasons. Furthermore, the passage describes how the immigration experience of Latin Americans and peoples from the Caribbean fit into the theory. (1) does not address the theory; (3) gives contradictory reasoning for a “no” response, and supports the theory; (4) is not supported by the passage; and (5) contradicts the information given in the passage. Prior knowledge of immigration history will aid the student in this question.

6. The answer is (5). This application question requires the examinee to know the geographical regions of the United States and understand the information on the map. Furthermore, the examinee must use their understanding about the costs of producing an agricultural product especially in relation to the costs of shipping raw materials to refineries. Large-scale grain production takes place in the Midwest (5) and savings on labor and fuel costs would occur if cereal factories were located in that region.

7. The answer is (1). This evaluation question requires the examinee to comprehend the concept “standard of living” and understand the information in the agricultural regions map. The examinee must recognize that one valid reason for the U.S. economic prosperity – one that is supported by the information of the map – is its vast natural resources (1). The map shows or implies transportation options on the Great Lakes (2) and uneven distribution of precipitation (3), but these facts lend little support to the generalization about U.S. standard of living. (4) is not true, and (5) does not provide the kind of important detail needed that (1), the answer, does
Science - Biology

Sample Test Questions

The hemoglobin inside our red blood cells carries oxygen around the body in our blood stream and releases this vital molecule into the tissues of our bodies. Carbon monoxide, however reacts with hemoglobin so it is not able to carry oxygen. This situation can cause many illnesses to our bodies and can be fatal in some cases. Freezing cold weather can also have a traumatic effect on us.

1. A driver is stranded in his car in a snowstorm in the mountains of Northern Colorado. In developing a survival strategy, the driver must cope with the possibility of freezing as well as the toxic effects of carbon monoxide in the automobile exhaust. Which of the following is the best course of action?

   (1) Keep the windows closed and the motor running. Go to sleep.
   (2) Open the windows, turn the motor off, and go to sleep.
   (3) Keep the windows open and the motor running. Stay awake.
   (4) Keep one window open and the motor running some of the time.
   (5) Keep the windows closed and the motor running some of the time. Stay awake.

2. Isaac Newton’s Third Law of Motion states that “Every action has an equal and opposite reaction.” Which of the following examples best illustrate this Law?

   (1) A player kicks a soccer ball.
   (2) A rower draws his oar back through the water and the kayak moves forward.
   (3) A rolling golf ball hits a rock and bounces into the rough.
   (4) A softball remains in one spot.
   (5) A skier “runs” into a tree on the downhill slope.
A pedigree indicates the inheritance pattern for a specific set of traits in a group of living things. This pedigree chart shows the inheritance pattern for three generations for human hair texture and it appears to be an example of blending inheritance. When an individual has one straight haired and one curly-haired gene, the result is wavy hair, the intermediate trait. The squares on the pedigree chart indicate the males and the circles, the females.

3. In generation three (F2) how many wavy-haired males are present?

(1) 0
(2) 1
(3) 2
(4) 3
(5) 4
4. If two wavy-haired people mate, what are the odds of their child having wavy hair?

(1) 10%
(2) 25%
(3) 50%
(4) 75%
(5) 100%
Answers to Sample Science Test Questions

*Question 1. Answer 4*
*Question 2. Answer 2*
*Question 3. Answer 3*
*Question 4. Answer 3*
Language Arts, Reading

Sample Passages and Test Questions

Questions 1 through 6 refer to the following excerpt.

WHY IS A GRANDFATHER’S CLOCK SO IMPORTANT?

“Well,” said I, “at least the fellow (Mr. Partridge) was hospitable to travelers.”

“I would not call it that.”

“We’re ten people. Nine of us and Mister Epps, and he fed and housed us all, and he let us enjoy his fire and shelter our animals. I’d call that hospitable, Father.” Though I did not like Mr. Partridge, in those days I sometimes found myself feeling sorry for individuals that the Old Man harshly condemned.

“You don’t know him as well as I.”

“Tell me, then. Tell me what you know about Mister Partridge that I don’t. Beyond his marrying a homely woman for her property.”

“Trust me, Owen.”

“Father, I’m trying to!”

We walked in silence for a while, and then Father said, “You remember when he came out to help me hitch the team to the wagon, while the rest of you were tending the beeves and sheep, and Ruth and Mary and the girls were inside the house?”

“I saw him out there, yes.”
“Well, the man came up to me and asked for payment for our food and lodging. He presented me with an itemized bill, written out.” It was an embarrassment to Father. Not because he had no money to give Mr. Partridge, he said, but because he had not expected it. If he had anticipated Mr. Partridge’s charges, he would have negotiated an acceptable arrangement beforehand, and failing that, we would have camped someplace alongside the river. Mr. Partridge had surprised Father, and he found himself painfully embarrassed by it…

“I must make a confession, Owen,” the Old Man went on. I said nothing, and he continued. “It concerns Mister Partridge. The man’s request for payment confused me. I told him that I could not pay him with money, because I had none. I’m ashamed to say that I gave him the instead the clock.”

“The clock? You mean grandfather’s clock?”

“Yes.”

I was astonished. Except for his chest of books, Great-Grandfather Brown’s mantel clock was Father’s most valued household possession. Made of cherrywood, it was a treasure that had been entrusted to Father’s care years earlier by his own father; it was perhaps his only family heirloom. It made no sense to me. How could he have handed it over to Mr. Partridge so easily? And in exchange for so little – a single night’s lodging.

1. Why does the narrator’s father state, “Trust me, Owen” (line 10)?

He:

(1) is reluctant to reveal his decision
(2) frequently does not trust his son
(3) is too busy to explain to his son
(4) wants to be the only one in charge
(5) wants to protect his son from Partridge’s anger

2. What is the effect of Owen’s emphatic statement, “Father, I’m trying to!” (line 11)?

The statement

(1) angers his father so much that he becomes silent
(2) shows his father that Owen is not interested
(3) persuades his father to tell Owen what has happened
(4) shows that Owen is easily angered
(5) reveals that Owen trusts his father completely

3. Why was the father embarrassed and confused by Mr. Partridge’s itemized bill?

The father

(1) had already negotiated a fair price
(2) believed that Partridge was joking
(3) once helped Partridge
(4) had not expected to be charged at all
(5) had hoped to sell the clock at a later date
4. Which of the following best describes Owen’s father?

(1) modest  
(2) impulsive  
(3) stubborn  
(4) reserved  
(5) selfish

5. What is the best conclusion about the group of ten people who are traveling together?

(1) They are a large religious group.  
(2) They are a family riding in a horse-drawn wagon.  
(3) They have only recently met.  
(4) They are all good friends with Mr. Partridge.  
(5) They all disagree about the value of the clock.

6. How might the events in the passage affect Owen’s future dealings with his father?

Owen will probably

(1) be uninvolved with his father  
(2) realize his father has weaknesses  
(3) look to his siblings for support  
(4) assume responsibility for the family  
(5) criticize his father for his stupidity
Answers to Language Arts, Reading Sample Test Questions

Question 1. Answer 1
Question 2. Answer 3
Question 3. Answer 4
Question 4. Answer 4
Question 5. Answer 2
Question 5. Answer 2
# Mathematics

## Area of a:

<table>
<thead>
<tr>
<th>Shape</th>
<th>Area Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square</td>
<td>$\text{Area} = \text{side}^2$</td>
</tr>
<tr>
<td>Rectangle</td>
<td>$\text{Area} = \text{length} \times \text{width}$</td>
</tr>
<tr>
<td>Parallelogram</td>
<td>$\text{Area} = \text{base} \times \text{height}$</td>
</tr>
<tr>
<td>Triangle</td>
<td>$\text{Area} = \frac{1}{2} \times \text{base} \times \text{height}$</td>
</tr>
<tr>
<td>Trapezoid</td>
<td>$\text{Area} = \frac{1}{2} \times \text{(base}_1+\text{base}_2) \times \text{height}$</td>
</tr>
<tr>
<td>Circle</td>
<td>$\text{Area} = \pi \times \text{radius}^2$; $\pi$ is approximately equal to 3.14</td>
</tr>
</tbody>
</table>

## Perimeter of a:

<table>
<thead>
<tr>
<th>Shape</th>
<th>Perimeter Formula</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Rectangle</td>
<td>$\text{Perimeter} = 2 \times \text{length} + 2 \times \text{width}$</td>
</tr>
<tr>
<td>Triangle</td>
<td>$\text{Perimeter} = \text{side}_1 + \text{side}_2 + \text{side}_3$</td>
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## Circumference of a:

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<tbody>
<tr>
<td>Circle</td>
<td>$\text{Circumference} = \pi \times \text{diameter}$; $\pi$ is approximately equal to 3.14</td>
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</tbody>
</table>

## Volume of a:

<table>
<thead>
<tr>
<th>Shape</th>
<th>Volume Formula</th>
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<tbody>
<tr>
<td>Cube</td>
<td>$\text{Volume} = \text{edge}^3$</td>
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<tr>
<td>Rectangular solid</td>
<td>$\text{Volume} = \text{length} \times \text{width} \times \text{height}$</td>
</tr>
<tr>
<td>Square pyramid</td>
<td>$\text{Volume} = \frac{1}{3} \times (\text{base edge})^2 \times \text{height}$</td>
</tr>
<tr>
<td>Cylinder</td>
<td>$\text{Volume} = \pi \times \text{radius}^2 \times \text{height}$; $\pi$ is approximately 3.14</td>
</tr>
<tr>
<td>Cone</td>
<td>$\text{Volume} = \frac{1}{3} \times \pi \times \text{radius}^2 \times \text{height}$ $\pi$ is approximately equal to 3.14</td>
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</table>

## Coordinate Geometry

<table>
<thead>
<tr>
<th>Distance between Points</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(x_1,y_1)$ and $(x_2,y_2)$</td>
<td>$\sqrt{(x_2-x_1)^2 + (y_2-y_1)^2}$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Slope of a Line</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(x_1,y_1)$ and $(x_2,y_2)$</td>
<td>$\frac{y_2-y_1}{x_2-x_1}$</td>
</tr>
</tbody>
</table>

## Pythagorean Relationship

$a^2 + b^2 = c^2$; $a$ and $b$ are legs and $c$ the hypotenuse of a right triangle

## Trigonometric Ratios

<table>
<thead>
<tr>
<th>Sine</th>
<th>Cosine</th>
<th>Tangent</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{opposite}$</td>
<td>$\text{hypotenuse}$</td>
<td>$\text{adjacent}$</td>
</tr>
</tbody>
</table>
### MEASURES OF CENTRAL TENDENCY

**Mean**

\[
\text{mean} = \frac{x_1 + x_2 + \ldots + x_n}{n}
\]

where the x’s are the values for which a mean is desired, and n is the total number of values for x.

**Median**

The middle value of an odd number of ordered scores, and halfway between the two middle values of an even number of ordered scores.

### SIMPLE INTEREST

Interest = principal \times rate \times time

### DISTANCE

Distance = rate \times time

### TOTAL COST

Total cost = (number of units) \times (price per unit)
Sample Mathematics Test Questions

Questions 1 and 2 refer to the following information.

After several interviews, Dedra has narrowed her choices to two jobs. She has used the table below to organize data that will help her make the final decision.

<table>
<thead>
<tr>
<th></th>
<th>Starting Salary</th>
<th>Raises</th>
<th>Transportation Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Systems</td>
<td>$26,000 per year</td>
<td>4% after six months; 6% of current salary after one year</td>
<td>20 gallons of gas per month plus $50 per month for parking</td>
</tr>
<tr>
<td>NetWorks</td>
<td>$2200 per month</td>
<td>10% after one year</td>
<td>Bus fare of $2 per day plus subway fare of $4.50 per day</td>
</tr>
</tbody>
</table>

1. If Dedra chooses the job at NetWorks, what would be her **ANNUAL** salary after she had worked for them for one year?

(1) $ 2,420  
(2) $22,000  
(3) $24,200  
(4) $26,400  
(5) $29,040
2. What can Dedra expect her monthly cost for transportation to be if she chooses to work for Applied Systems?

(1) $ 50
(2) $ 70
(3) $ 80
(4) $170
(5) Not enough information is given.

3. A painter mixes gallons of paint in a large cylindrical bucket so that there will be no difference in color between individual gallons. The bucket is shown below.

If one gallon of paint has a volume of approximately 8000 cm³, what is the maximum number of whole gallons of paint that can be poured into the bucket?

(1) 3
(2) 7
(3) 9
(4) 11
(5) 37
4. A surveyor made the measurements shown in the diagram below.

In feet, what is the measure of AB, the straight-line distance across the stream?

(1) 50
(2) 75
(3) 80
(4) 100
(5) 150
Questions 5 and 6 refer to the following information and graph.

Five people aged 40 to 50 who exercised regularly had their resting heart rates recorded. The results are shown in the graph above.

5. Based on the graph above, which of the following would be a reasonable resting heart rate for a person aged 40 to 50 who regularly exercised for 20 minutes?

(1) 77  
(2) 67  
(3) 57  
(4) 52  
(5) 48

6. Which of the following statements is a reasonable conclusion based on the data in the graph above?

(1) The resting heart rate of a person in this age group is not affected by regular exercise.  
(2) Regular exercise is likely to increase the resting heart rate of a person in this age group.  
(3) A person’s resting heart rate is related to the person’s age.  
(4) Regular exercise by a person in this age group would likely lower her or his resting heart rate.  
(5) As a person gets older, her/his resting heart rate will increase.
7. Cabezos Construction Company has a clause in the contract for its latest building that rewards the company for completing the project early. The company will receive a bonus of $1000 if they are one day early and an additional $1500 for each day more than one. The formula is \( B = 1000 + 1500(d - 1) \), where \( B \) is the amount of the bonus and \( d \) is the number of days they complete construction early. If the company completes the project 10 days early, what will be the amount of their bonus?

(1) $15,000  
(2) $14,500  
(3) $14,000  
(4) $13,500  
(5) $10,000

8. Shane is working with a spreadsheet on his computer. The spreadsheet will calculate the cost of the wood trim around rectangular windows based on the dimensions of the window and the price of the wood. The following entries have been made.

<table>
<thead>
<tr>
<th>Length of window in feet</th>
<th>Width of window in feet</th>
<th>Price per foot of wood trim</th>
<th>Cost of trim for window</th>
</tr>
</thead>
<tbody>
<tr>
<td>A7</td>
<td>B7</td>
<td>C7</td>
<td></td>
</tr>
</tbody>
</table>

Shane wants to enter a formula in the last column so that the spreadsheet will calculate the final cost of the job. Which of the following formulas should he enter? Helpful information can be found on the Formula page at the beginning of this group of questions.

(1) A7 x B7 x C7  
(2) (2 x A7 + 2 x B7) x C7  
(3) A7 + B7 + C7  
(4) (A7 + B7) x C7  
(5) A7 x B7 + C7
The following three questions are specific examples of items likely to be found on the calculator portion of the new Mathematics Test.

9. Last month the balance in Tisha’s checkbook was $1219.17. Since then she has deposited her latest paycheck of $2425.66 and written checks for $850.00 (rent), $235.89 (car payment), and $418.37 (credit card payment). What is the current balance in Tisha’s checking account?

(1) $ 921.40
(2) $2140.57
(3) $3215.27
(4) $3929.92
(5) $5149.09
A farmer wants to plant a rectangular field that will cover an area of 1000 square feet. To minimize the amount of fencing around the field, she knows the rectangle should be a square. To find the length of a side of a square \( s \) when its area \( A \) is known, the following formula is used: \( s = \sqrt{A} \). Rounded to the nearest tenth of a foot, what would be the length of a side of the farmer’s square field if it contains an area of 1000 square feet?

(1) 28.7  
(2) 29.4  
(3) 31.6  
(4) 36.2  
(5) 41.8

11. The warehouse is shipping 6832 calculators. If each box can contain 28 calculators, how many boxes will be needed for the shipment?

(1) 79  
(2) 154  
(3) 169  
(4) 244  
(5) 239
The following four questions are specific examples of alternate format items.

12. Byron purchased a $5000 certificate of deposit (CD) at his local bank. The CD will pay him 7% simple interest at the end of two years. In dollars, how much **INTEREST** will Byron have earned from his CD at the end of the two year period?

Mark your answer in the circles in the grid on your answer sheet.

13. To test the effect of a fertilizer, pea plants are measured each week. If one pea plant measured 28.4 centimeters this week and 16.1 centimeters last week, by how many centimeters did it grow during the last week?

Mark your answer in the circles in the grid on your answer sheet.

14. One ingredient in the sauce Kyle is preparing for tonight’s dinner is ½ teaspoon of red pepper. If the recipe he is using is designed to make enough sauce for 8 servings but Kyle is only making 4 servings, what fraction of a teaspoon of red pepper should he use?

Mark your answer in the circles in the grid on your answer sheet.

15. Show the location of the point whose coordinates are (3, -4).

Mark your answer on the coordinate plane grid on your answer sheet.
Coordinate Plane Grid Answer Sheet

12. 
13. 
14. 
15.
## Answers to Mathematics Sample Test Questions

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<table>
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For the alternate format questions, the solution will be explained and the grids completed in an acceptable manner.

12. The formula for simple interest is found on the Formula page in the front of the GED Mathematics Test and at the beginning of this group of questions.

\[
\text{simple interest} = \text{principal} \times \text{rate} \times \text{time} \\
\text{simple interest} = \$5000 \times 0.07 \times 2 \\
\text{simple interest} = \$700 \\
\]

To show that the answer can be right-, left-, or center-justified, three acceptable griddings of this response are shown below.
13. The amount of growth is the difference between this week’s measurement and last week’s measurement.
amount of growth = this week’s measure – last week’s measure
amount of growth = 28.4 – 16.1
amount of growth = 12.3 (centimeters)
One acceptable gridding of this response is shown below.

14. Since Kyle is serving 4 from a recipe designed for 8, he needs 4/8, or ½, the amount of each ingredient. One half of ½ teaspoon is found by multiplying.

(1/2) x (1/2) = 1/4

This could be gridded using the decimal equivalent of ¼, namely 0.25, but the fraction is gridded below to illustrate the use of the fraction bar.
NOTES:
In the last two examples, a decimal answer and a fraction were gridded. Mixed numbers, such as $3 \frac{1}{2}$ CANNOT be gridded. They must be changed to decimal or fraction form. In the case of $3 \frac{1}{2}$, the answer could be gridded as 3.5 or $\frac{7}{2}$. Answers for alternate-format questions using the standard grid shown in the previous three examples will NEVER be a negative number, such as −8, since the grid does not accommodate negative numbers. Both of the points mentioned above are included in the directions for alternate format questions found on the actual test.

15. The coordinates in the ordered pair are listed with the x-, or horizontal, coordinate first and the y-, or vertical, coordinate second. The point (3, -4) is located in the lower-right, or fourth, quadrant of the graph.