

[www.act.org/compass](http://www.act.org/compass)

## Welcome

Marion Technical College is pleased that you have made the important step of continuing your education at Marion Technical College.

A key element in your success at MTC is proper placement in your courses. This booklet is designed to help you through the assessment process.

The COMPASS test provides you and your advisor with information to determine the best course placement for you, so that you may begin your college career successfully.

This booklet gives you an opportunity to become familiar with the COMPASS test. After working the sample questions, you will have a better understanding of how the test is designed and how you can prepare for the test.

On the MTC web site ([www.mtc.edu](http://www.mtc.edu)) you can find links to the COMPASS web site ([www.act.org/compass](http://www.act.org/compass)) and Test Prep Preview ([www.testpreview.com/compass\\_practice.htm](http://www.testpreview.com/compass_practice.htm)). Click on Quick Links and then on COMPASS. Both of these sites provide you with practice questions in math, reading, and writing for the COMPASS test.

If you have any additional questions, call the Student Resource Center for MTC at (740) 389-4636, extension 315.

The following information will help you have a positive COMPASS test experience.

- Allow about 1 and ½ hours to take the test
- Turn off all cell phones and pagers
- No food or drinks allowed in the testing area
- No children allowed in the testing area
- Review the information in this COMPASS study guide
- Make an appointment to take the test by calling 740-389-4636 ext. 315

## **What is COMPASS?**

COMPASS is a computer-based placement test used by colleges, including Marion Technical College, across the United States. The test measures a student's achievement in three areas: mathematics, writing, and reading. The test gives a numerical score that indicates where a student should be placed in the college's math, writing, and reading courses. There is no score that is "passing." The score shows areas of academic strengths and/or needs.

## **Why do I need to take COMPASS?**

Marion Tech students arrive on campus with varied skill levels and life experiences. Students come to MTC directly from high school, from other colleges, and from work-related backgrounds. In order to give students the best opportunity for academic success, students and advisors need to know current levels of achievement, and the COMPASS gives that needed information. The goal of the assessment is to place students in the correct courses according to their current academic achievement levels.

## **How are the COMPASS scores used?**

The scores generated by the COMPASS indicate a student's current level of achievement. There is a minimum score required for student enrollment in math and writing classes. These minimum scores were established by the Ohio Board of Regents (the governing body for Ohio's two-year and four-year colleges). The student and his/her advisor will review the student's scores to determine the best class placement for the student. Please be sure your advisor has your COMPASS scores when you meet with him or her.

## **How can I prepare for the COMPASS?**

The best way to prepare for the COMPASS is to review the examples in this booklet before taking the assessment. You may also see and work examples at [www.act.org/compass](http://www.act.org/compass) and [www.testpreview.com/compass\\_practice.htm](http://www.testpreview.com/compass_practice.htm).

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## COMPASS Reading Test

The reading test has comprehension question in two general areas: referring and reasoning. Please read the following passage and respond to the questions. Answers are in the back of the booklet.

### Sample Passage 1

#### What Methods Do Andean Farmers Use?

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

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

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

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

1. What is the main idea of the first paragraph?

- A. Attention to Native farming practices will lead to greater awareness of the threat of climate change.
- B. Popularity of small-scale farming in the North will lead to greater attention to Native farming practices.
- C. Global demand for food will lead to increasing efficiency of large-scale farming in the North.
- D. It will be worthwhile to include a greater focus on Native farming practices in public discussions concerning the threat of climate change.
- E. Despite potential climate change, public debate will have little effect on industrial farming practices

2. In the second paragraph, the information about potato-growing practices in the industrial model of agriculture serves to:

- A. give an example of a potential problem that Native farming practices could help to alleviate.
- B. show the likely global consequences of a possible food shortage caused by industrial farming practices.
- C. show how pests and disease are less effectively resisted by crops grown in the industrial farming model.
- D. give an example of how public debate has had little effect on the agricultural practices of the North.
- E. give an example of how Native farming practices and industrial farming practices derive from different climatic conditions.

3. The passage states that which of the following is true of the small number of potato varieties that account for most of the potatoes produced on Earth currently?

- A. They are grown in the Andean region.
- B. They all require very similar soil and climate conditions.
- C. They are no longer suited to their environment.
- D. They are based on genetic material from crops developed by indigenous peoples.
- E. They make optimal use of available soil and water resources.

4. As it is used in the passage, the underlined word *fabricated* most nearly means:

- A. woven.
- B. falsely stated.
- C. fully clothed.
- D. manufactured.
- E. unwrapped.

## Compass Writing Test

The writing test presents a written passage that contains several errors. You must identify the error(s) and select the correct answer from the alternatives provided. Answers are in the back of the booklet.

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

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

Item 1.

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

Item 2.

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

Item 3.

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

Item 4.

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

## COMPASS Mathematics Test

COMPASS assesses five domains of math: numerical skills/pre-algebra, algebra, college algebra, geometry, and trigonometry. The difficulty level of the problems will vary in the areas of basic skills, application, and analysis. Please work the following problems. Answers are in the back of the booklet.

### Pre-algebra

1. The lowest temperature on a winter morning was  $-8^{\circ}\text{F}$ . Later that same day the temperature reached a high of  $24^{\circ}\text{F}$ . By how many degrees Fahrenheit did the temperature increase?  
**A.**  $3^{\circ}$   
**B.**  $8^{\circ}$   
**C.**  $16^{\circ}$   
**D.**  $24^{\circ}$   
**E.** 32
2. Four students about to purchase concert tickets for \$18.50 for each ticket discover that they may purchase a block of 5 tickets for \$80.00. How much would each of the 4 save if they can get a fifth person to join them and the 5 people equally divide the price of the 5-ticket block?  
**A.** \$ 1.50  
**B.** \$ 2.50  
**C.** \$ 3.13  
**D.** \$10.00  
**E.** \$12.
3. On a math test, 12 students earned an A. This number is exactly 25% of the total number of students in the class. How many students are in the class?  
**A.** 15  
**B.** 16  
**C.** 21  
**D.** 30  
**E.** 48

## Algebra

1. When getting into shape by exercising, the subject's maximum recommended number of heartbeats per minute ( $h$ ) can be determined by subtracting the subject's age ( $a$ ) from 220 and then taking 75% of that value. This relation is expressed by which of the following formulas?

- A.  $h = .75(220 - a)$
- B.  $h = .75(220) - a$
- C.  $h = 220 - .75a$
- D.  $.75h = 220 - a$
- E.  $220 = .75(h - a)$

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

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

## College Algebra

1. A manufacturing company processes raw ore. The number of tons of refined material the company can produce during  $t$  days using Process A is  $A(t) = t^2 + 2t$  and using Process B is  $B(t) = 10t$ . The company has only 7 days to process ore and must choose 1 of the processes. What is the maximum output of refined material, in tons, for this time period?

- A. 8
- B. 10
- C. 51
- D. 63
- E. 70

## Answers to Sample Questions

### Reading

1. D

2. A

3. B

4. D

### Writing

1. A

2. B

3. A

4. A

### Pre-algebra

1. E

2. B

3. E

### Algebra

1. A

2. E

### College Algebra

1. E

**COMPASS  
PREPARATION  
BOOKLET**

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## Student Resource Center Hours of Operation

Fall, Winter, and Spring Quarters

Monday through Thursday 8 AM to 8:30 PM

Friday 8 AM to 4 PM

Saturday 8 AM to 1 PM

## Summer Hours

Monday, Wednesday, and Thursday 8 AM to 5 PM

Tuesday 8 AM to 6 PM

Friday 8 AM to 3 PM

Closed on Saturday

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