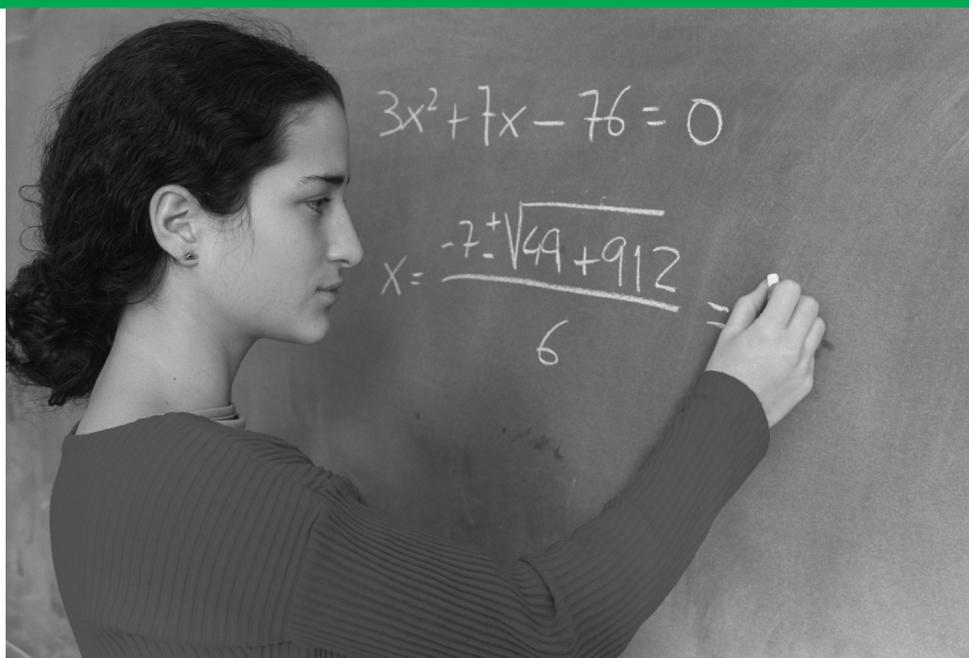




Oklahoma Modified Alternate Assessment Program (OMAAP)

Algebra I

PARENT, STUDENT, AND TEACHER GUIDE



2014-2015 & 2015-2016

Oklahoma State Department of Education

Testing Dates

Please reference the Oklahoma State Department of Education Web site for the most current testing dates:

- <http://ok.gov/sde/assessment-administrator-resources-administrators>

Acknowledgement

Photograph of student calculating a math equation on blackboard, copyright © by Pixtal/AGE Fotostock. Used by permission.



**STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
STATE OF OKLAHOMA**

Dear Parent/Guardian and Student:

Soon students will be participating in the Oklahoma Modified Alternate Assessment Program. These tests are designed to measure knowledge in Mathematics, Reading, Science, and History.

You will receive a report on your child's performance on the tests. This report will indicate your child's areas of strength as well as areas needing improvement.

This guide provides practice questions, objectives covered in the tests, and a list of test-taking tips. Discuss these materials with your child ahead of time to encourage test preparedness. During the test week, it is very important for students to get plenty of sleep, eat a good breakfast, and arrive at school on time.

If you have any questions about the Oklahoma Modified Alternate Assessment Program, please contact your local school or the State Department of Education.

Sincerely,
Your State Superintendent of
Public Instruction

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The Oklahoma Modified Alternate Assessment Program

The Governor, state legislators, and other Oklahoma elected officials have committed themselves to ensuring that all Oklahoma students receive the opportunity to learn the skills required to succeed in school and in the workplace. To achieve this goal, schools must prepare every Oklahoma student for colleges, universities, and careers that require new and different skills.

Under the direction of the Legislature, Oklahoma teachers, parents, and community leaders met to agree upon the skills that students are expected to master by the end of each grade. The results of their efforts, Oklahoma Academic Standards, provide the basis for Oklahoma's core curriculum.

In addition, the Legislature established the criterion-referenced test component of the Oklahoma School Testing Program (OSTP) to measure students' progress in mastering the Oklahoma Academic Standards. Tests have been developed by national test publishers that specifically measure the Oklahoma Academic Standards at the end-of-instruction levels. Teachers from throughout Oklahoma have been involved in the review, revision, and approval of the questions that are included in the tests.

The Oklahoma Modified Alternate Assessment Program (OMAAP) is a criterion-referenced testing program which compares a student's performance with performance standards established by the State Board of Education. The performance standards are based upon recommendations from groups of Oklahoma educators who evaluated the test and recommended the performance standards for the different levels of performance for each test. The Oklahoma Performance Index, or OPI, is a scaled score earned by a student that places the student into one of the four performance levels (Advanced, Satisfactory, Limited Knowledge, Unsatisfactory).

The Modified assessments have been developed for students with disabilities who can make significant progress but may not reach grade-level achievement standards within the same time frame as other students, even after receiving the best-designed instructional interventions from highly qualified teachers. Beginning in 2013–2014, the Modified assessments are intended for those students who are repeat testers with a previous score in the same content area. The purpose of this test is to show proficiency in order to meet graduation requirements only.

The Modified assessments provide information about subject-level student academic performance in Reading, Mathematics, Science, and History in relation to the Oklahoma Academic Standards based on modified achievement standards. End-of-Instruction assessments are available in the following subjects:

English II

Algebra I

Biology I

U.S. History

These assessments provide informative data that educators can use to make instructional decisions, based on student performance in relation to the Oklahoma Academic Standards.

Achieving Classroom Excellence (ACE) End-of-Instruction Legislation.

The state statute reads as follows:

“Each student who completes the instruction for English II, English III, United States History, Biology I, Algebra I, Geometry, and Algebra II at the secondary level shall complete an end-of-instruction test, to measure for attainment in the appropriate state academic content standards in order to graduate from a public high school with a standard diploma.” All students shall take the tests prior to graduation, unless otherwise exempt by law.

“Beginning with students entering the ninth grade in the 2008–2009 school year, every student shall demonstrate mastery of the state academic content standards in the following subject areas in order to graduate from a public high school with a standard diploma: Algebra I, English II, and two of the following five: Algebra II, Biology I, English III, Geometry, and United States History.”

To demonstrate mastery, the student shall attain at least a satisfactory score on the end-of-instruction criteria. Students who do not attain at least a satisfactory score on any end-of-instruction test shall be provided remediation and the opportunity to retake until at least a proficient score is attained on the tests of Algebra I, English II, and two of the following five: Algebra II, Biology I, English III, Geometry, and United States History, or will be allowed to substitute approved alternate tests in order to meet this requirement.

Students who do not meet these requirements may graduate from a public high school with a standard diploma by demonstrating mastery of state academic content standards by alternative methods as approved by the State Board of Education.

Students who score ten percent (10%) above the cut scores approved by the State Board of Education for the ACT, SAT, ACT PLAN, or PSAT alternate tests shall be deemed to have satisfactorily demonstrated mastery of the state academic content standards in the subject areas for which alternative tests have been approved and shall be exempt from taking the EOI tests in the subject areas of Algebra II, English III, Geometry, or U.S. History.

Students who have a score that is equal to or above the cut scores approved by the State Board of Education for the Advanced Placement course exams, ACT Workkeys, College-Level Examination Program (CLEP), or International Baccalaureate (IB) alternate tests shall be deemed to have satisfactorily demonstrated mastery of the state academic content standards in the subject areas for which alternative tests have been approved and shall be exempt from taking the EOI tests in the subject areas of Algebra II, English III, Geometry, or U.S. History. The State Board of Education shall adopt rules providing for implementation of the use of these alternate tests.

Overview of the OMAAP Tests

OMAAP tests are built from previously administered items contained in the OCCT operational test forms.

Items from the OCCT were modified and reviewed by committees of educators to be used on the Modified assessments. The following table illustrates the modification rules that are used for each subject area.

| Subject Area | Modification Rules and Guidelines |
|---------------------------------------|--|
| Universal | <ul style="list-style-type: none"> • Minimize the number of questions on the page (limit to 2 or 3). • Provide only three answer options instead of four. • Highlight the main points in the question or passage by underlining and using bold font. • Avoid questions that require students to select the better/best answer. • Be consistent in wording of directions across grades and subjects. • Minimize the use of pronouns and prepositional phrases. • Avoid the use of multiple-meaning words and words that can function as more than one part of speech. • Enlarge art when possible. • Simplify art when possible, (i.e. remove unnecessary labels, use less gray scale, use thicker lines when outlining, etc.). • Box informational text in an item. • Bullet information when possible (e.g. bullet detailed information or processes). • Reduce reading load of stem, stimuli, and answer options when possible. • Revise answer options to address parallelism and minimize outliers. |
| English II | <ul style="list-style-type: none"> • Break passages into smaller portions. • Place the questions that pertain to the smaller portion underneath or on a page facing that section. • Use footnotes for grades 6–8 and English II. • Put items in order of appearance in the passage. • Delete extraneous information including irrelevant material and unnecessary words in items or graphics (e.g. remove “most likely”). • Delete one part of a compound answer choice when possible. • Change passive voice to active voice when appropriate. • Eliminate answer choices that give students the option of making no changes to the item. • Direct student attention to graphics. • Simplify visual complexity of graphics. |
| Writing Prompt/ English II | <ul style="list-style-type: none"> • Simplify the prompt. • Simplify the Writer’s Checklist. • Use a 3-point holistic writing rubric. |

| Subject Area | Modification Rules and Guidelines |
|------------------|--|
| Algebra I | <ul style="list-style-type: none"> • Unless required by standard, avoid items with negative and positive answer choices that use the same number. • Place any items with coordinate grids on one page. • Be consistent with qualifiers in the stem and answer choices. • Avoid questions that use “best” or “closest.” • Avoid complicated art. • List coordinate grids in answer options vertically with plenty of space between the answer options to make the grids more accessible to the visually impaired (however, avoid spanning item over two pages). • Simplify reading load, including vocabulary, when possible. • Eliminate stimuli sets. • Delete one part of a compound answer choice when possible. • Delete griddable items, negative items, and items that cannot be modified based on guidelines. • Delete extraneous information including irrelevant material and unnecessary words in items or graphics. • Simplify complex sentence structure and vocabulary in item and answer choices without eliminating math vocabulary. • Change passive voice to active voice when appropriate. • Add precise language to provide additional context for clarification. • Use consistent language within an item in order to focus student attention on what is being asked. • Revise text as necessary to maintain the authenticity and logic of the item due to modifications. • Use bullets to clearly organize complex items into smaller, meaningful parts. • Direct student attention to graphics. • Simplify visual complexity of graphics. • Provide new text and/or reorganize existing text within the question to explain or clarify the graphic. • Provide additional graphics to support text, emphasize ideas, and facilitate comprehension. • Reduce the number of variables and simplify digits in items when appropriate. • Limit the number of steps and/or operations in multi-step problems. • Provide appropriate formula and/or conversion near the item. • Provide explicit directions to explain a process such as measuring (as long as it does not impact reading load). |

| Subject Area | Modification Rules and Guidelines |
|---|--|
| <p style="text-align: center;">Biology I</p> | <ul style="list-style-type: none"> • Reduce the amount of reading. • Avoid complicated art. • Simplify tables and charts by removing irrelevant rows or columns. • Box formulas to make them stand out. • Make sure answer options align to content and process. • Simplify reading load, including vocabulary, when possible. • Eliminate stimuli sets. • Delete cluster items, negative items, and items that cannot be modified based on guidelines. • Delete extraneous information including irrelevant material and unnecessary words in items or graphics. • Simplify complex sentence structure and vocabulary in item and answer choices without eliminating science vocabulary. • Change passive voice to active voice when appropriate. • Change items from an open-ended statement to a direct question or vice versa, as necessary, for clarification. • Add precise language to provide additional context for clarification. • Use consistent language within an item in order to focus student attention on what is being asked. • Revise text as necessary to maintain the authenticity and logic of the item due to modifications. • Use bullets to clearly organize complex items into smaller, meaningful parts. • Direct student attention to graphics. • Simplify visual complexity of graphics. • Provide new text and/or reorganize existing text within the question to explain or clarify the graphic; science content must remain accurate. • Provide additional graphics to support text, emphasize ideas, and facilitate comprehension. • Reduce the number of variables and simplify digits in items when appropriate. • Limit the number of steps and/or operations in multi-step problems. • Provide the appropriate formula and/or conversion near the item. • For Biology I, avoid using items that reference x and y axis on a graph. |

| Subject Area | Modification Rules and Guidelines |
|---------------------|---|
| U.S. History | <ul style="list-style-type: none"> • Reduce the amount of reading. • Avoid complicated art. • Simplify tables and charts by removing irrelevant rows or columns. • Simplify maps. • Box formulas to make them stand out. • Delete one part of a compound answer choice when possible. • Delete extraneous information including irrelevant material and unnecessary words in items or graphics. • Simplify complex sentence structure and vocabulary in item and answer choices without eliminating social studies vocabulary. • Change passive voice to active voice when appropriate. • Change items from an open-ended statement ending to a direct question or vice versa, as necessary, for clarification. • Add precise language to provide additional context for clarification. • Use consistent language within an item in order to focus student attention on what is being asked. • Revise text as necessary to maintain the authenticity and logic of the item due to modifications. • Use bullets to clearly organize complex items into smaller, meaningful parts. • Provide definition of non-tested vocabulary in a text box near item and bold the defined term in the item or provide definition in brackets behind the word. • Direct student attention to graphics. • Simplify visual complexity of graphics. • Provide additional graphics to support text, emphasize ideas, and facilitate comprehension. • Provide new text and/or reorganize existing text within the question to explain or clarify the graphic. • Delete items that cannot be modified based on guidelines. |

Test-Taking Tips

The following tips provide effective strategies for taking the Oklahoma Modified Alternate Assessment. Test-taking skills cannot replace studying based on the Oklahoma Academic Standards, which serve as the foundation for the tests.

General Test-Taking Tips:

- DO...** read this guide carefully and review the sample items.
- DO...** make sure you understand all test directions. If you are uncertain about any of the directions, raise your hand to ask questions before testing has started.
- DON'T...** wait until the last minute to study for the test. These tests cover a lot of material, and you cannot learn it all in a short amount of time.
- DON'T...** worry about the tests. Students who are calm and sure of themselves do better on tests.

Tips for the Multiple-Choice Tests:

- DO...** read each question and every answer choice carefully. Choose the best answer for each question.
- DO...** check your work if you finish your test early. Use the extra time to answer any questions that you skipped.
- DO...** read the reading selections for the English II test carefully.
- DO...** remember that if you cannot finish the test within the time allotted, you will be given additional time to complete the test.
- DO...** mark all your answers in the test book.
- DON'T...** allow any stray pencil marks to go inside of the question boxes from working problems or making notes in your test book.
- DON'T...** spend too much time on any one question. If a question takes too long to answer, skip it and answer the other questions. You can return to any skipped questions after you have finished all other questions.

The Algebra I Test

This multiple-choice test is administered in one section in a paper/pencil test booklet. Testing time is approximately 60 minutes with up to an additional 20 minutes for testing directions. The test is not strictly timed. Testing sessions for students who need more time can be extended. However, some studies have shown that more than one hour of additional time can contribute to a decrease in student scores. This additional time is available as an immediate extension of the testing session; it is not available as a separate session at another time.

Students who finish a test early should make sure their work is complete and are encouraged to check and verify their answers prior to closing their test books. Once a test has been completed, students will not be allowed to reopen their test books.

Approved calculators may be used by all students on the Algebra I End-of-Instruction Assessment. See Calculator Policy on page 12.

The following sections of this guide:

- list the Oklahoma Academic Standards that are covered on the Algebra I End-of-Instruction test.
- present the blueprint.
- present a sample test item.
- present directions and a sample test.

End-of-Instruction Calculator Policy

Revised 8/27/09

Purpose

- The items on the ACE Algebra I, ACE Geometry, ACE Algebra II, and ACE Biology I assessments are designed so that calculators are not required to solve any of the problems. All tasks can be solved without the use of a calculator. However, certain tasks are much more difficult if a calculator is not available.
- Before the first day of the test, students using a calculator for any EOI mathematics or science assessment should be familiar with the use of the specific calculator that will be utilized. Students must be instructed in the use of calculators or this tool can actually hinder students' performance on the assessment. The appropriate calculator will be available for the online version of the EOI mathematics and science tests.

Subject-specific Requirements

- ACE Algebra I, ACE Geometry, and ACE Biology I:
 - Scientific Calculators meeting general requirements may be used on all/specified sections.
- ACE Algebra II:
 - Graphing Calculators meeting general requirements may be used on all/specified sections.

General Requirements

- Calculators are permitted but are not required.
- Calculator capabilities described for a specific subject give the *maximum* capabilities allowed; calculators with less capability are acceptable.
- Students may not share calculators.
- Students may use their own calculators or those provided by the school.
- Calculators that make noise must have the sound feature turned off.
- Calculators that have paper tape must have the tape removed.
- Calculators with power cords must have the cord removed.
- All calculators must have the memory cleared before and after the test session.
- Any programs or applications must be removed prior to the test session.

Prohibited Calculators

- Pocket organizers
- Handheld or laptop computers
- Electronic writing pads or pen-input devices
- Calculators built into cellular phones or other electronic communication devices
- Calculators with a typewriter keypad (QWERTY format)
- **Calculators with programs or applications that cannot be removed or disabled (e.g., Polynomial Root-Finder and Simultaneous Equation Solver on TI-86)**
- Calculators with built-in computer algebra systems, such as, but not limited to:
 - Casio: Algebra fx 2.0, ClassPad 300, and all model numbers that begin with CFX-9970G
 - Texas Instruments: All model numbers that begin with TI-89, TI-92, or TI-Nspire CAS
 - Hewlett-Packard: HP-48GII and all model numbers that begin with HP-40G or HP-49G

Test Security and Validity

- Using a calculator that does not meet the above requirements invalidate the test results and is a violation of test security and test validity. Any violation will be reported to the State Superintendent and may result in revocation of teaching and/or administrative certificates.

Oklahoma Academic Standards (2009 Revision)

The Oklahoma Academic Standards measured in the End-of-Instruction Algebra I multiple-choice test are presented below. They represent Oklahoma core curriculum that is applicable to Algebra I course study and that can be assessed in a statewide testing program. The Oklahoma Academic Standards for Algebra I are grouped into standards with specific objectives listed under each one. Student performance on the multiple-choice test will be reported at the standard level.

End-of-Instruction Algebra I

Standard 1: Number Sense and Algebraic Operations—The student will use expressions and equations to model number relationships.

1. Equations and Formulas
 - a. Translate word phrases and sentences into expressions and equations and vice versa.
 - b. Solve literal equations involving several variables for one variable in terms of the others.
 - c. Use the formulas from measurable attributes of geometric models (perimeter, circumference, area, and volume), science, and statistics to solve problems within an algebraic context.
 - d. Solve two-step and three-step problems using concepts such as rules of exponents, rate, distance, ratio and proportion, and percent.
2. Expressions
 - a. Simplify and evaluate linear, absolute value, rational, and radical expressions.
 - b. Simplify polynomials by adding, subtracting, or multiplying.
 - c. Factor polynomial expressions.

Standard 2: Relations and Functions—The student will use relations and functions to model number relationships.

1. Relations and Functions
 - a. Distinguish between linear and nonlinear data.
 - b. Distinguish between relations and functions.
 - c. Identify dependent and independent variables, domain, and range.

- d. Evaluate a function using tables, equations, or graphs.
2. Linear Equations and Graphs
- a. Solve linear equations by graphing or using properties of equality.
 - b. Recognize the parent graph of the functions $y = k$, $y = x$, $y = |x|$, and predict the effects of transformations on the parent graph.
 - c. Slope
 - I. Calculate the slope of a line using a graph, an equation, two points, or a set of data points.
 - II. Use the slope to differentiate between lines that are parallel, perpendicular, horizontal, or vertical.
 - III. Interpret the slope and intercepts within the context of everyday life (e.g., telephone charges based on base rate [y-intercept] plus rate per minute [slope]).
 - d. Develop the equation of a line and graph linear relationships given the following: slope and y-intercept, slope and one point on the line, two points on the line, x-intercept and y-intercept, or a set of data points.
 - e. Match equations to a graph, table, or situation and vice versa.
3. Linear Inequalities and Graphs
- a. Solve linear inequalities by graphing or using properties of inequalities.
 - b. Match inequalities (with 1 or 2 variables) to a graph, table, or situation and vice versa.
4. Solve a system of linear equations by graphing, substitution, or elimination.

Standard 3: Data Analysis, Probability, and Statistics—The student will use data analysis, probability, and statistics to formulate and justify predictions from a set of data.

1. Data Analysis
 - a. Translate from one representation of data to another and understand that the data can be represented using a variety of tables, graphs, or symbols and that different modes of representation often convey different messages.
 - b. Make valid inferences, predictions, and/or arguments based on data from graphs, tables, and charts.
 - c. Solve two-step and three-step problems using concepts such as probability and measures of central tendency.
2. Collect data involving two variables and display on a scatterplot; interpret results using a linear model/equation and identify whether the model/equation is a line of best fit for the data.

Algebra I – Test Blueprint

School Years 2014-2015 and 2015-2016

The blueprint describes the content and structure of an assessment and defines the ideal number of test items by standard and objective of the Priority Academic Student Skills/ Oklahoma Academic Standards (PASS/OAS).

| Standards and Objectives | Ideal Number of Items | Ideal Percentage of Items |
|---|-----------------------|---------------------------|
| 1.0 Number Sense and Algebraic Operations | 10 - 12 | 23% - 30% |
| 1.1 Equations and Formulas | 4 - 6 | |
| 1.2 Expressions | 5 - 7 | |
| 2.0 Relations and Functions | 21 - 23 | 49% - 53% |
| 2.1 Relations and Functions | 2 - 3 | |
| 2.2 Linear Equations and Graphs | 12 - 14 | |
| 2.3 Linear Inequalities and Graphs | 3 - 5 | |
| 2.4 Systems of Equations | 2 - 3 | |
| 3.0 Data Analysis, Probability, and Statistics | 6 - 8 | 14% - 20% |
| 3.1 Data Analysis | 4 - 6 | |
| 3.2 Line of Best Fit | 1 - 3 | |
| Total Test | 40 - 43 | 100% |

(Please note this blueprint does not include items that may be field-tested.)

- A minimum of 6 items is required to report a standard, and a minimum of 4 items is required to report results for an objective.
- Percentages are approximations and may result in a sum other than 100 due to rounding.
- The actual number of items scored for a student may be slightly lower pending a review of item statistics.

Oklahoma State Department of Education
Office of Assessments



Updated July 2014



Algebra I Sample Test Directions

The sample test is a condensed version of a test, similar to the test you will be taking in this content area.

Sample Test Directions

1. Read each question to yourself.
2. Think of the best answer.
3. Answers will be marked directly in the test booklet.
4. Mark the circle for the answer you have chosen directly on the corresponding letter (as shown in the example below).

Example:

SAMPLE

What is the simplified form of the expression $3x - x$?

- $2x$
- $3x$
- $4x$



Sample Test

1 Which expression represents three less than five times a number?

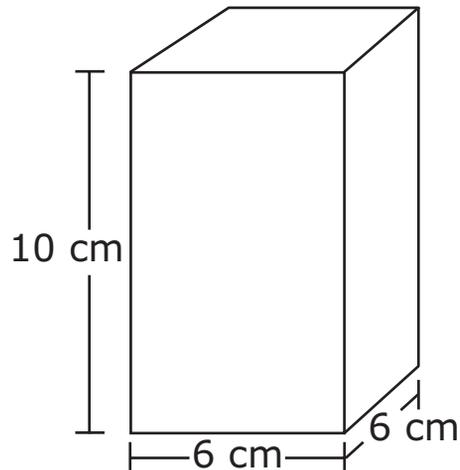
Ⓐ $5x - 3$

Ⓑ $3 - 5x$

Ⓒ $3x - 5$

2

A container is shaped like a rectangular prism. The height of the container is 10 centimeters (cm), and each side of the base of the container is 6 centimeters.



What is the volume (V) of the container?

$$V = lwh$$

- Ⓐ 22 cubic centimeters
- Ⓑ 60 cubic centimeters
- Ⓒ 360 cubic centimeters



3 A jacket originally cost \$60. It is on sale for \$45.

Which is the percent of discount for the jacket?

- (A) 15%
- (B) 25%
- (C) 75%

4

$$(x + 3)(x - 5)$$

What is the simplified form of this expression?

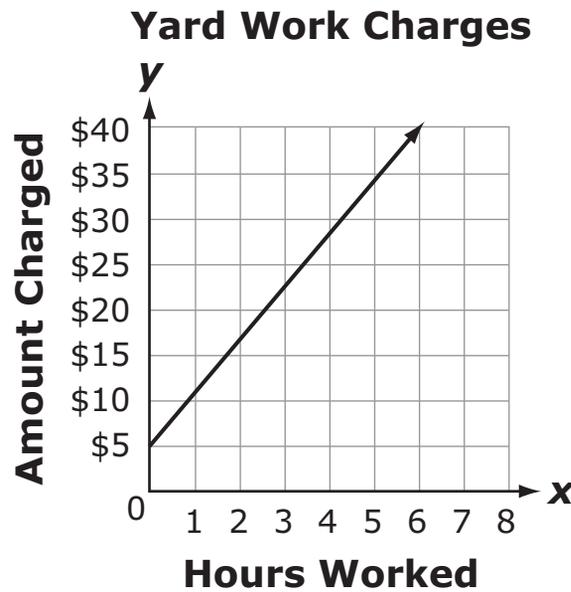
- (A) $x^2 - 15$
- (B) $x^2 - 8x - 15$
- (C) $x^2 - 2x - 15$

5 What is the slope of the line represented by
 $y = -9x + 15$?

- (A) -9
- (B) $\frac{-9}{15}$
- (C) 15

6

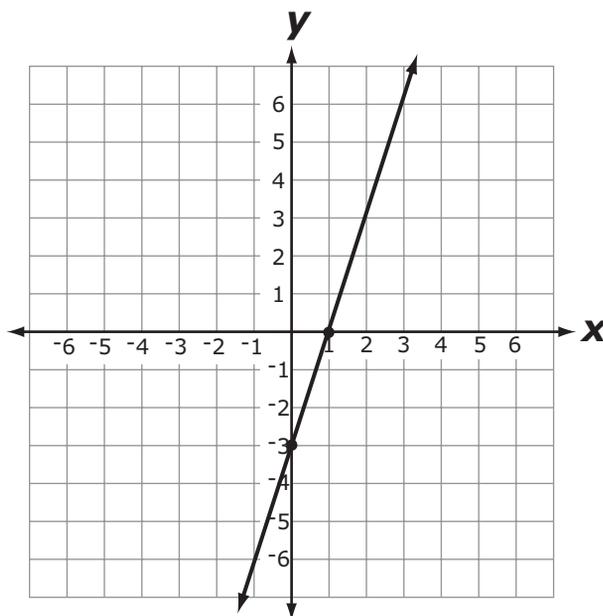
Donna charges a fixed fee plus an hourly rate to do yard work. The graph shows how much Donna charges for doing yard work.



Which of these would represent Donna's hourly rate?

- Ⓐ slope
- Ⓑ x-intercept
- Ⓒ y-intercept

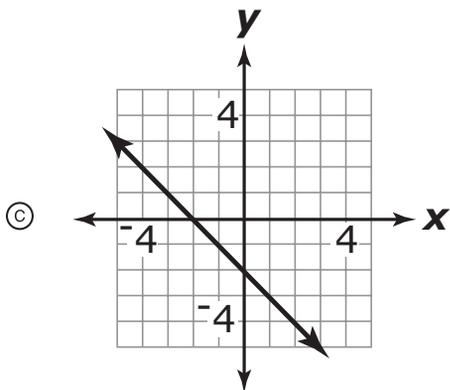
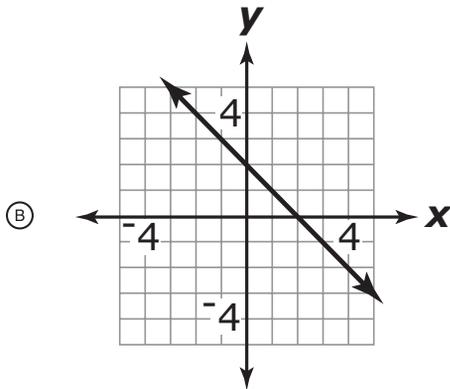
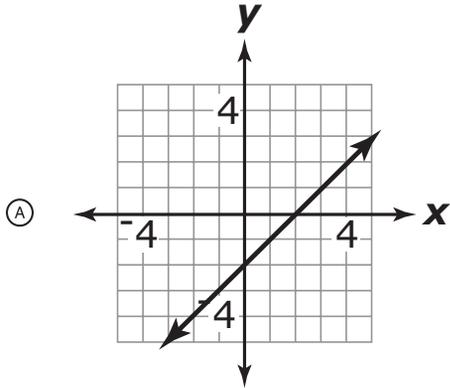
7



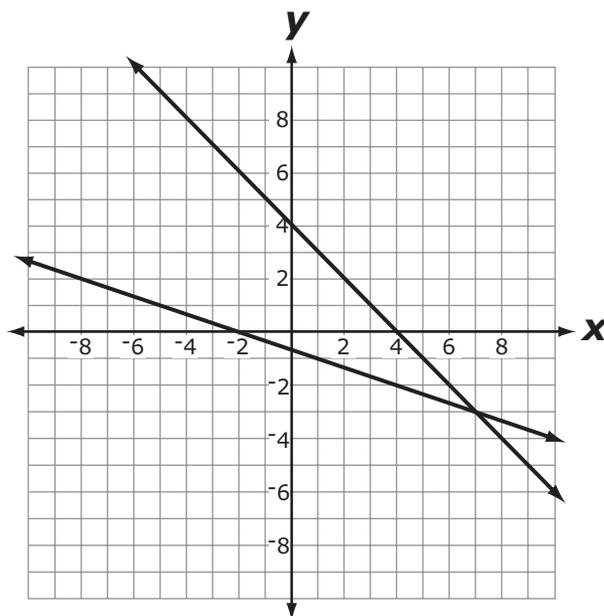
What is the equation of the line with an x -intercept of 1 and a y -intercept of -3 ?

- Ⓐ $y = x - 3$
- Ⓑ $y = 3x - 1$
- Ⓒ $y = 3x - 3$

8 Which graph represents the equation $y = -x - 2$?



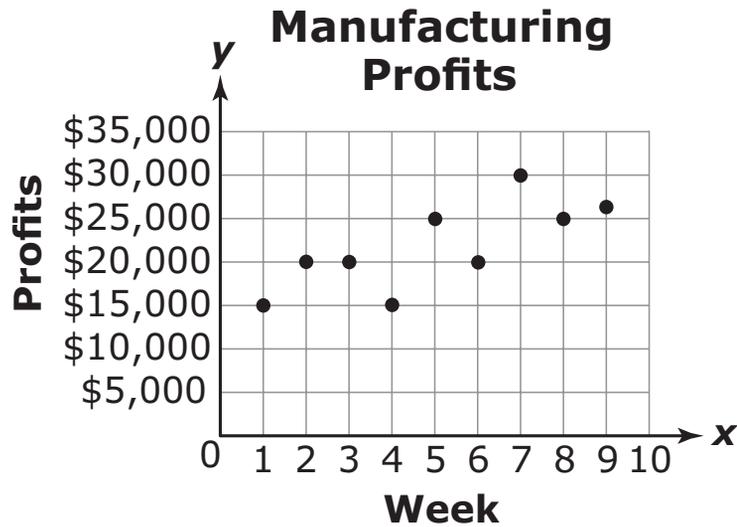
9



What is the solution to this graphed system of equations?

- (A) (3, -7)
- (B) (4, 0)
- (C) (7, -3)

- 10** The graph below shows Jason Manufacturing’s weekly profits over the past two months.



What is the best prediction for profits in week 10?

- Ⓐ \$15,000
- Ⓑ \$30,000
- Ⓒ \$42,000



Answer Key

| Algebra I | | | | |
|-------------|----------------|----------|-----------|-------|
| Item Number | Correct Answer | Standard | Objective | Skill |
| Sample | A | 1 | 2 | a |
| 1 | A | 1 | 1 | a |
| 2 | C | 1 | 1 | c |
| 3 | B | 1 | 1 | d |
| 4 | C | 1 | 2 | b |
| 5 | A | 2 | 2 | c I |
| 6 | A | 2 | 2 | c III |
| 7 | C | 2 | 2 | d |
| 8 | C | 2 | 2 | e |
| 9 | C | 2 | 4 | - |
| 10 | B | 3 | 1 | b |