

Mathematics

Pre-Test

Introduction

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The pre-test that follows is designed to identify areas where you, the student, can improve your skills before or after taking the Alabama High School Graduation Exam (AHSGE) in Mathematics.

Directions

Read each question carefully and darken the circle corresponding to your answer choice. Once you have completed this pre-test, circle the questions you answered incorrectly on the pre-test evaluation chart on page 36. For each question that you missed on the pre-test, review the corresponding sections in the book as given in the evaluation chart. Read the instructional material, do the practice exercises, and take the section review test at the end of each section.

Purpose of the Pre-Test

The following pre-test can be used as practice for the AHSGE in Mathematics, but it is primarily a diagnostic tool to help you identify which skills you can improve in order to prepare better for the actual test. Any pre-test question answered incorrectly may identify a skill needing improvement or mastery. Review the corresponding skill(s) indicated in the Pre-Test Evaluation Chart by reading the instructional material on the given pages and completing the practice exercises and reviews. By reviewing each skill, you will improve mastery of the material to be tested on the Mathematics portion of the AHSGE and potentially increase the score you receive on that exam. (The practice tests, which are given in separate booklets, are provided to give you additional practice taking tests similar to the actual AHSGE in Mathematics.)

General Information About the AHSGE in Mathematics

The AHSGE in Mathematics will consist of 100 multiple-choice questions. You must obtain a score of 477 or higher on the exam to pass.

Mathematics Pre-Test

Simplify the following problems. Darken the circle corresponding to your answer choice.

1. Simplify: $(3 + 1)^2 \div 2 - 3^2 \cdot 2$

- A -10
- B -4
- C -2
- D 4

A B C D

5. Simplify: $3x^2 + xy + 2(x^2 - xy)$

- A $5x^2$
- B $5x^4$
- C $5x^2 - xy$
- D $5x^4 - x^2y^2$

A B C D

2. Simplify: $3x - y - (x - y)$

- A $4x - 2y$
- B $2x - 2y$
- C $2x + y$
- D $2x$

A B C D

6. Simplify: $3.5x - 2 + 0.5x + 1.5$

- A $2x - 3.5$
- B $2x + 0.5$
- C $4x + 3.5$
- D $4x - 0.5$

A B C D

3. Simplify: $|2.1 - 7.4| - 1.5$

- A -6.8
- B 3.8
- C 8
- D 11

A B C D

7. Simplify: $\frac{1}{3}x + \frac{1}{2}y + 2(\frac{1}{6}x + \frac{1}{4}y)$

- A $\frac{1}{3}x + \frac{1}{2}y$
- B $\frac{1}{6}x + y$
- C $x + y$
- D $\frac{2}{3}x + y$

A B C D

4. Simplify: $x + \frac{4x + 6x}{2}$

- A $6x$
- B $9x$
- C $11x$
- D $12x$

A B C D

8. Simplify: $\frac{x + 4}{2} + \frac{3x - 6}{6}$

- A $x + 1$
- B $4x - 2$
- C $6x + 2$
- D $6x + 12$

A B C D