



# Algebra and Geometry

## *in Achievement Series and Performance Series*

An increasing emphasis on STEM (Science, Technology, Engineering, and Math) means educational standards must keep pace. Scantron's High School Algebra and Geometry items, available in Achievement Series item banks and in Performance Series adaptive tests, can help measure these critical skills.

Scantron provides items written to assess Algebra and Geometry, covering topics in Algebra I, Algebra II and Geometry. Use these items to assess student skills in these higher mathematics subjects, regardless of grade level.

Scantron's in-house experts developed these items based on information from the Common Core State Standards for Mathematics and its appendices. A minimum of five editors reviewed each item for content appropriateness and bias. In addition, editors paid careful attention to both the reading level and contextual appropriateness of each question.

### **Demonstrate Grade-Level Proficiency with Achievement Series**

An effective assessment strategy includes tests that measure proficiency at a specific point in time for each grade level, such as at the end of each unit or learning module or at the end of a term.

Achievement Series Algebra and Geometry items, available as a standalone item bank and in many of our item bank packages, make it easy to measure skills covered by upper-level mathematics standards.

### **Track Attainment of Skills Over Time with Performance Series**

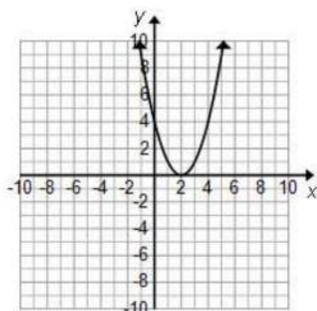
Traditional standardized assessments focus on standards for one grade level at a time, making it challenging to determine a student's overall performance or to focus on that student's needs.

Performance Series High School Algebra and Geometry items provide students with assessments tailored to their proficiencies in the covered subject areas.

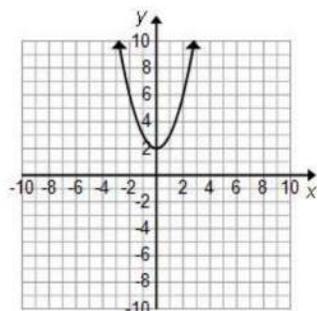
- **The online assessment adjusts automatically to each student's ability level, generating more difficult questions if the student is answering correctly and easier questions if the student is answering incorrectly.**
- **Results connect to standards documents at the skill level, providing better detail to guide instructional adjustments and personalization.**

The result is a valid and reliable scaled score you can use to measure academic growth over time.

Look at the graphs of the functions below.



$$y = (x - 2)^2$$



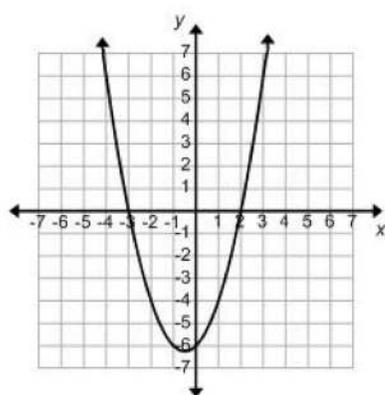
$$y = x^2 + 2$$

Which statement is true?

- ✓ A. The functions are increasing in the interval  $[2, \infty)$
- B. The functions are increasing in the interval  $[0, \infty)$
- C. The root of the function  $y = (x - 2)^2$  is 4, and the root of the function  $y = x^2 + 2$  is 2.
- D. The y-intercept of the function  $y = (x - 2)^2$  is 2, and the function  $y = x^2 + 2$  does not have a y-intercept.

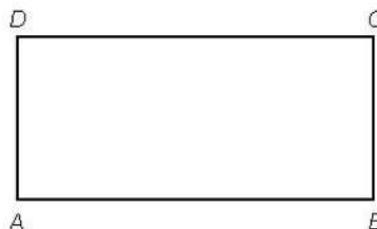


Use the graph to find the zeros of the polynomial function.



- A. (3, 0) and (-2, 0)
- ✓ B. (-3, 0) and (2, 0)
- C. (0, -3) and (0, 2)
- D. (0, 3) and (0, -2)

Which reflection will transform the rectangle below onto itself?



- A. reflection across the line passing through the midpoints  $\overline{AB}$  and  $\overline{BC}$
- ✓ B. reflection across the line passing through the midpoints  $\overline{AB}$  and  $\overline{CD}$
- C. reflection across  $\overline{AC}$
- D. reflection across  $\overline{AB}$

## Connect Assessment Results with Instructional Resources for High School Algebra & Geometry

Use results from Achievement Series and Performance Series Algebra and Geometry with Scantron's instructional resources partners:

- **netTrekker® Search** directly connects educators to resources aligned to student needs as revealed by Algebra and Geometry results using either Achievement Series or Performance Series. This connector saves valuable time by locating fun, web-based instructional resources.
- Based on Performance Series results, **Edgenuity® and Classworks® solutions** automatically generate individual learning paths using award-winning content—no importing or data manipulation required. Use these paths with students as generated, or modify the paths to complement your instructional plans. Spend less time generating lesson plans and more time interacting with students.



**INFORM INSTRUCTION  
TO IMPACT STUDENT  
ACHIEVEMENT TODAY!**

For a free consultation to meet your academic goals, call **800.722.6876** or visit us at **[www.scantron.com/k12](http://www.scantron.com/k12)** to learn more.

### About Us

Scantron® provides a comprehensive set of solutions that help improve student outcomes in K-12 education. We offer software and services to meet the needs of customers' assessment programs regardless of where they are on the technology spectrum—pure paper, pure online, or anywhere in between.

