

Common Core Standards


As the Common Core Standards adoption is gaining approval across most states, educators are looking for resources that will help them understand how their existing curriculum and instruction will be impacted. Riverside Publishing has developed an item bank tightly aligned with the Common Core Standards in Mathematics.

The *Assess2Know*® item bank allows educators the ability to build quality assessments to measure student progress for grades two through high school. All *Assess2Know*® items include attributes such as Bloom's Taxonomy and cognitive difficulty levels as well as answer choice rationales based on common student misconceptions.

Mathematics: Grade 2

Grade 2 **Mathematics**

1. Kayla bought a muffin for \$1.35. She gave the cashier \$2.00.



- Show how much change the cashier should give Kayla.
- Use words, numbers, and/or pictures, including \$ and ¢ symbols, to explain your work.

57 **STOP**

Grade 2
DO NOT TURN THE PAGE
Q4 Benchmark Assessment
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- Grade: 2
- Content Area: Math
- Domain: Measurement and Data
- Standard: Work with time and money.
- Cluster: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.
- Item Type: Constructed Response
- Bloom's Taxonomy Level: Application
- Cognitive Difficulty Level: 3

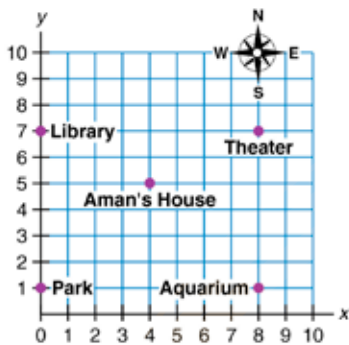
In this item, instructional time is intended to focus on four critical areas. Two of these areas include building fluency with addition and subtraction and using standard units of measure. This item requires the student to select and accurately apply methods of adding and/or subtracting that are appropriate to finding the correct change for the amounts shown, as well as, using their knowledge of money values in real world context.

Mathematics: Grade 5

Grade 5

Mathematics

1. The grid below shows a section of the town where Aman lives. He went to the library to return a book.



Which point shows the location of the library?

- A. (7, 0)
- B. (0, 7)
- C. (8, 7)
- D. (7, 8)

Grade: 5
Content Area: Math

Domain: Geometry
Standard: Graph points on the coordinate plane to solve real-world and mathematical problems.
Cluster: Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

Item Type: Multiple Choice
Bloom's Taxonomy Level: Comprehension
Cognitive Difficulty Level: 1

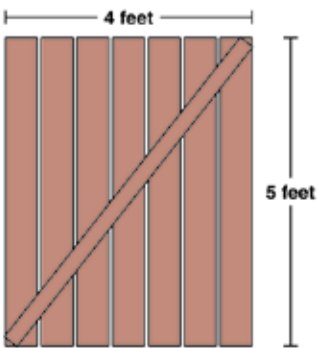
This item, while its cognitive demand is not very high, provides the student the opportunity to clearly demonstrate their understanding of the X and Y axis and translate that knowledge to determine the coordinate points of the library. This item uses a coordinate plane that is clear and easy to read and does not distract the student from what is being assessed.

Mathematics: Grade 8

Grade 8

Mathematics

2. Hannah is building a gate. She needs to add a diagonal support to strengthen the gate as shown below.



Which of the following lengths of wood can Hannah use to make the diagonal support?

- A. 4 feet
- B. 5 feet
- C. 6 feet
- D. 7 feet

Grade: 8
Content Area: Math

Domain: Geometry
Standard: Understand and apply the Pythagorean Theorem.
Cluster: Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

Item Type: Multiple Choice
Bloom's Taxonomy Level: Application

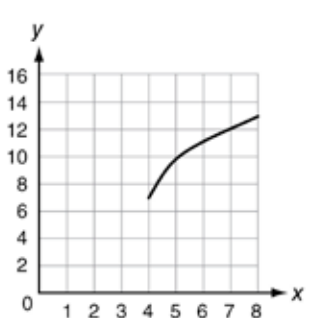
Cognitive Difficulty Level: 2

In this item, instructional time is intended to focus on three critical areas. One of these areas includes understanding and applying the Pythagorean Theorem. In this item, students apply the Pythagorean Theorem in a real-world context. Students determine the missing length of the hypotenuse of a right triangle when given the lengths of the other two sides and use that knowledge to identify the possible length of a diagonal support for a gate.

Mathematics: High School

High School
Mathematics

1. The graph of $y = 3\sqrt{x-4} + 7$ is shown below.



What is the equation of this function's inverse?

A. $y = \frac{1}{9}(x-7)^2 + 4$ for $x \geq 4$

B. $y = \frac{1}{9}(x-7)^2 + 4$ for $x \geq 7$

C. $y = \frac{1}{3}(x+4)^2 - 7$ for $x \geq 4$

D. $y = \frac{1}{3}(x+4)^2 - 7$ for $x \geq 7$

59
STOP

High School
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- ◀◀ **Grade:** High School
- Content Area:** Math
- Domain:** Functions
- Standard:** Building Functions
- Cluster:** Build new functions from existing functions; Find inverse functions.
- Sub Cluster:** Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse.
- Item Type:** Multiple Choice
- Bloom's Taxonomy Level:** Synthesis
- Cognitive Difficulty Level:** 3

The Common Core high school standards are broken into six conceptual categories in order to portray a coherent view of high school mathematics. One of these categories includes functions. This item is of high quality because students must correctly find the inverse of a function, and must understand the limits on domain and range of functions, and how the domain and range change when the inverse is found.

Call us to receive additional information on how these tools help students achieve mastery of the Common Core Mathematics Standards.
 Customer Service 800-323-9540

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