

Partnership for Assessment of Readiness for College and Careers (PARCC)

Sample Test Questions

MATH: Algebra 1, Geometry, Algebra II

MATH

Algebra 1

Sample question: Let a and b be rational numbers and let c be an irrational number.

Part A

Select the appropriate cell in the table to show whether each value is always rational, never rational, or sometimes rational.

Value	$a + b$	$a - b$	c^2
Always Rational			
Never Rational			
Sometimes Rational			

Part B

Consider a quadratic equation with integer coefficients and two distinct zeros. If one zero is irrational, which statement is true about the other zero?

- A. The other zero must be rational.
- B. The other zero must be irrational.
- C. The other zero can be either rational or irrational.
- D. The other zero must be non-real.

MATH

Geometry

Sample question: Triangle ABC has vertices at $A(1, 2)$, $B(4, 6)$, and $C(4, 2)$ in the coordinate plane. The triangle will be reflected over the x -axis and then rotated 180° about the origin to form $\triangle A'B'C'$. What are the vertices of $\triangle A'B'C'$?

- A. $A'(1, -2)$, $B'(4, -6)$, $C'(4, -2)$
- B. $A'(-1, -2)$, $B'(-4, -6)$, $C'(-4, -2)$
- C. $A'(-1, 2)$, $B'(-4, 6)$, $C'(-4, 2)$
- D. $A'(1, 2)$, $B'(4, 6)$, $C'(4, 2)$

MATH

Algebra II

Sample question: What extraneous solution arises when the equation $\sqrt{x + 3} = 2x$ is solved for x by first squaring both sides of the equation?

$x =$

