

UNIT 1 - LESSON PLANS

Class PreCalculus Topic Inverse Relations and Functions

Lesson 7 Of 1

Objective

Students will:

- Find inverse functions.
- 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.
- Verify by composition that one function is the inverse of another.
- Read values of an inverse function from a graph or a table, given that the function has an inverse.
- Produce an invertible function from a non-invertible function by restricting the domain.

"I Can" Statement

I can find inverse functions.

I can 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.

I can verify by composition that one function is the inverse of another.

I can read values of an inverse function from a graph or a table, given that the function has an inverse.

I can produce an invertible function from a non-invertible function by restricting the domain.

Common Core Standards

CCSS.MATH.CONTENT.HSF.BF.B.4

Find inverse functions.

CCSS.MATH.CONTENT.HSF.BF.B.4.A

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. For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$.

CCSS.MATH.CONTENT.HSF.BF.B.4.B

(+) Verify by composition that one function is the inverse of another.

CCSS.MATH.CONTENT.HSF.BF.B.4.C

(+) Read values of an inverse function from a graph or a table, given that the function has an inverse.

CCSS.MATH.CONTENT.HSF.BF.B.4.D

(+) Produce an invertible function from a non-invertible function by restricting the domain.

Bell Work

See 1-7 Bell work

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Procedures

1. Start and lead student discussion related to the bell work.
2. Distribute the Guided Notes
3. Present lesson or play a video lesson.
4. Use an Online Activity if time permitted.
5. Distribute Lesson Assignment.

Assessment

Bell Work 1-7
Assignment 1-7
Exit Quiz 1-7

Additional Resources

See Online Activities