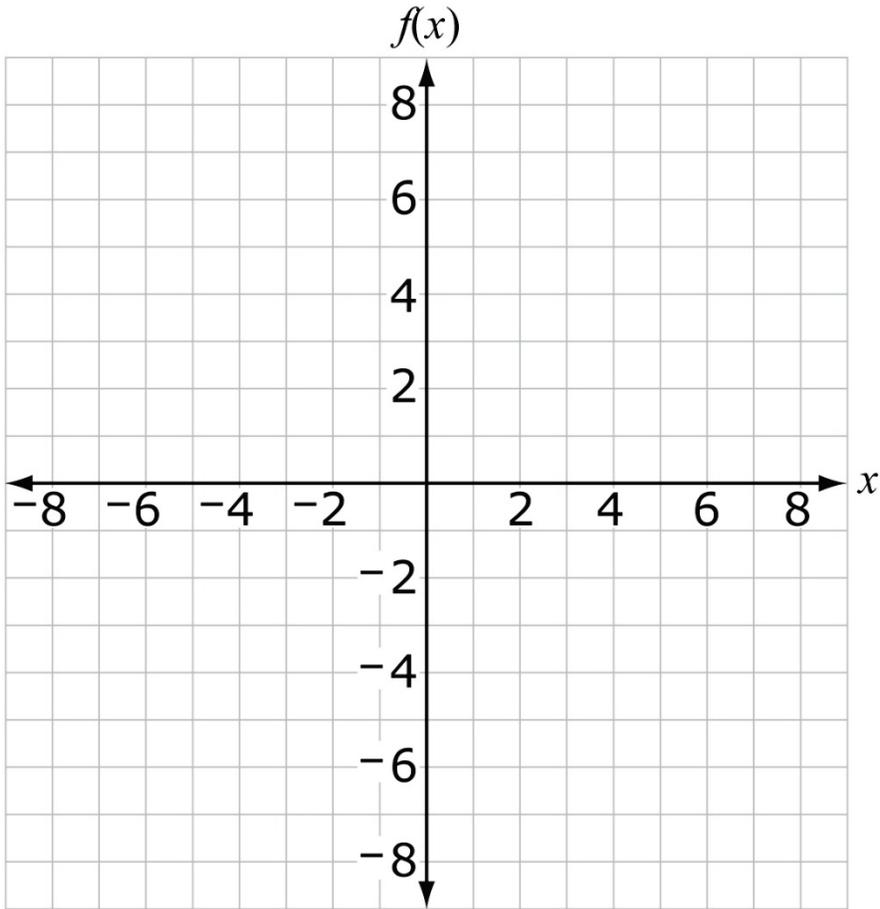


MAT.HS.TE.2.00FBF.B.046

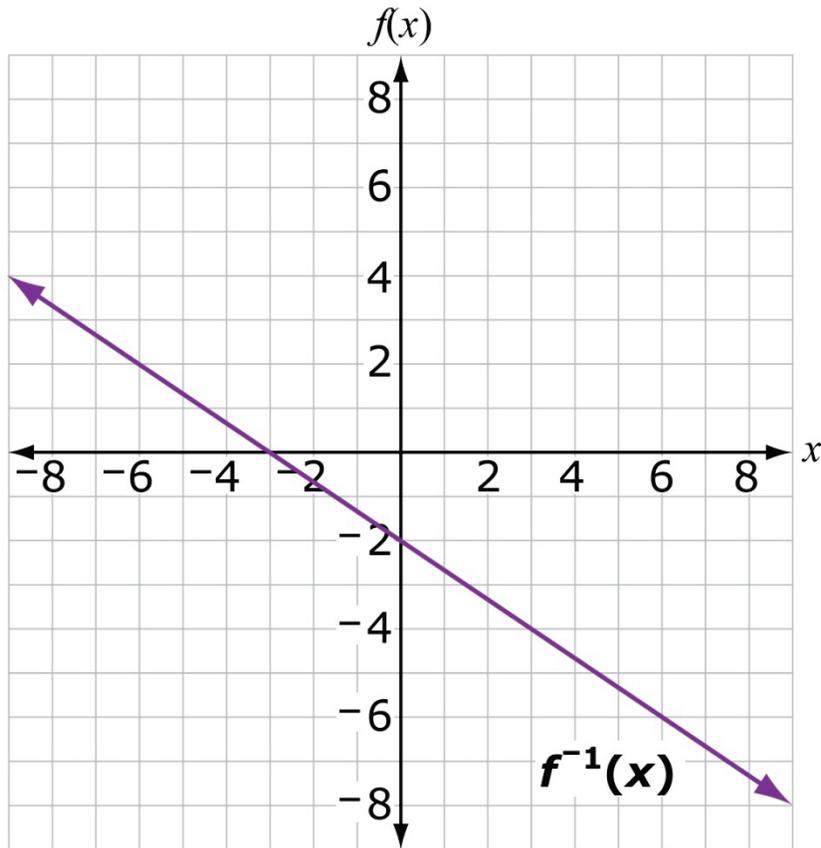
Sample Item ID:	MAT.HS.TE.2.00FBF.B.046
Grade:	HS
Primary Claim:	Claim 2: Problem Solving Students can solve a range of well-posed problems in pure and applied mathematics, making productive use of knowledge and problem-solving strategies.
Secondary Claim(s):	Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.
Primary Content Domain:	Functions
Secondary Content Domain(s):	
Assessment Target(s):	2 B: Select and use appropriate tools strategically.
Standard(s):	F-BF.4
Mathematical Practice(s):	1, 5
DOK:	2
Item Type:	TE
Score Points:	1
Difficulty:	M
Key:	See Sample Top-Score Response.
Stimulus/Source:	
Target-specific attributes (e.g., accessibility issues):	
Notes:	TE Template: Single Line

Draw the graph of the inverse of $f(x) = -\frac{3}{2}x - 3$ on the coordinate grid below.



[To create a line, click in the coordinate grid below to create the first point on the line. To create the second point on the line, move the pointer and click.]

Sample Top-Score Response:



Correct line graphs will receive 1 point.

Key: line containing y-intercept (0, -2) and slope of $-\frac{2}{3}$

TE Information:

Item Code: MAT.HS.TE.3.00FBF.E.046

Template: Single Line

Interaction Space Parameters:

- A. False
- B. Grid centered at (0, 0); point in bottom-left corner is (-8, -8); point in top-right corner is (8, 8); grid increment size is one unit; coordinate axes are displayed and labeled with x and $f(x)$.
- C. Make grid visible
- D. Label first and last grid increment
- E. False
- F. N/A
- G. True
- H. Draw extended line

Scoring Data:

Start Point

A: Do not consider

End Point

A: Do not consider

x-Intercept

A: Do not consider

y-Intercept

A: Consider

B: -2

C: 0

Slope

A: Consider

B: $-\frac{2}{3}$

C: 0

Scoring Rule Explanation:

Based on the scoring rule and the scoring data for this particular item, students that create a line with y-intercept (0, -2) and slope of $-\frac{2}{3}$ will receive 1 point. All other lines will receive 0 points.