

Find the inverse of each function.

1. $f(x) = 10 - 4x$

2. $g(x) = 15x - 10$

3. $h(x) = \frac{x-12}{4}$

4. $j(x) = \frac{3x+1}{6}$

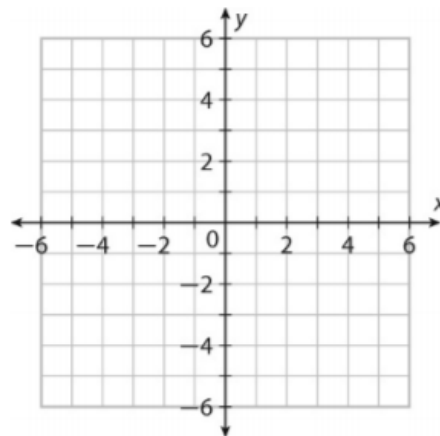
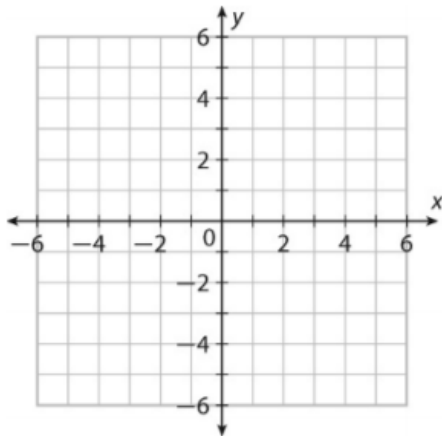
Find the inverse of each function. Then graph the function and its inverse.

5. $f(x) = 5x + 10$

6. $f(x) = \frac{9}{2}x - 5$

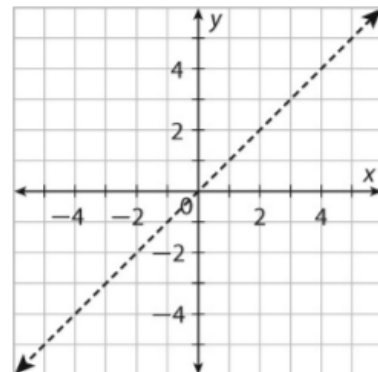
$f^{-1}(x) =$ _____

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7. **Find the ordered pairs of the inverse function. Graph the function and its inverse.**

Function		Inverse Function	
x	y	x	y
1	5		
2	2		
3	-1		



8. **Find the Error** A student was asked to find the inverse of $f(x) = 2x + 1$. The student's work is shown. Explain why the student is incorrect and what the student should have done to get the correct answer.

The function $f(x) = 2x + 1$ involves two operations: multiplying by 2 and adding 1. The inverse operations are dividing by 2 and subtracting 1. So, the inverse function is $f^{-1}(x) = \frac{x}{2} - 1$.