

Inverse Problems

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Name: _____

Period: _____

Write the inverse of each relation. The inverse of relation Z is written Z^{-1} .

1) $A = \{(1,-2),(3,7),(4,-5),(6,-3),(10,-1)\}$

$A^{-1} =$

2) $B = \{(-3,-1),(-2,4),(-1,0),(0,-3)\}$

$B^{-1} =$

3) $C = \{(-9,7),(4,-2),(7,9),(12,1),(13,0)\}$

$C^{-1} =$

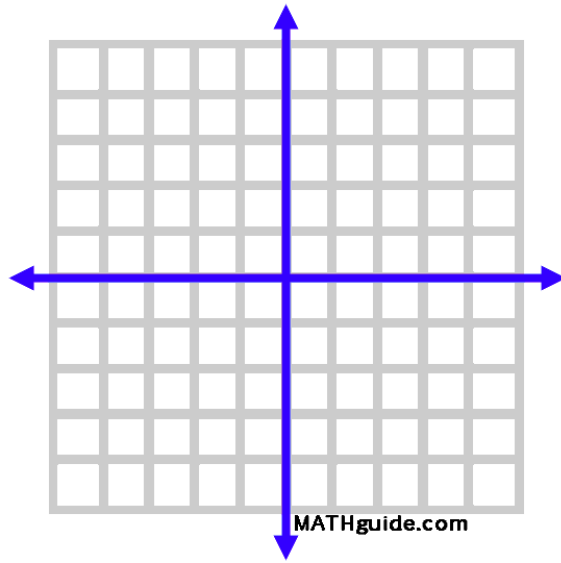
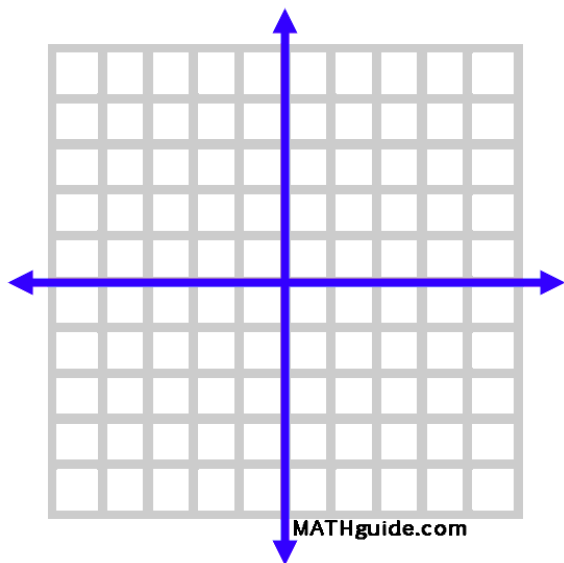
4) $D = \{(-12,-9),(3,4),(4,-5),(6,0),(11,1)\}$

$D^{-1} =$

Calculate the inverse of each function. Then, graph the function, its inverse, and the line $y = x$ all on the same coordinate plane for each problem below. Use the back of this sheet to show your work.

5) $f(x) = 2x - 4$

6) $g(x) = \frac{1}{3}x + 2$



7) $h(x) = x^2 - 2$

8) $j(x) = (x - 1)^2 + 1$

