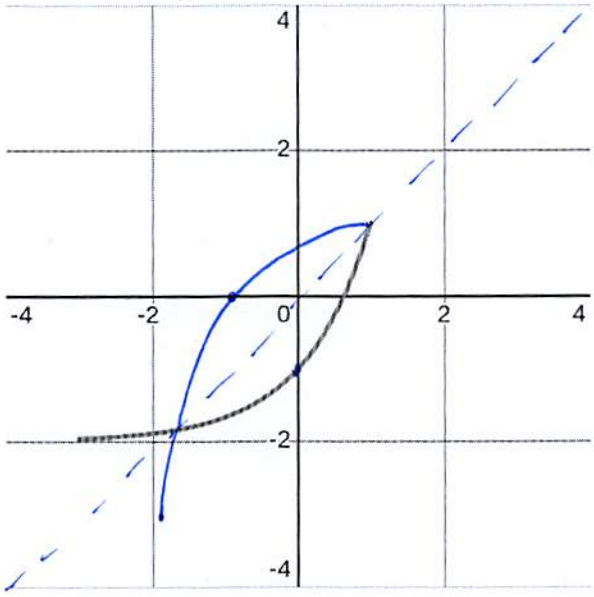
Name: Solutions Section: 7 8

1. Graph the inverse function on the same plot.



2. Find a formula for the inverse of $f(x) = \dfrac{x+3}{x-7}$.

$y = \dfrac{x+3}{x-7}$

$x = \dfrac{y+3}{y-7}$

$x(y-7) = y+3$

$xy - 7x = y+3$

$xy - y = 7x + 3$

$(x-1)y = 7x+3$

$y = \dfrac{7x+3}{x-1}$

$f^{-1}(x) = \dfrac{7x+3}{x-1}$