MATH 125 College Algebra Name_____

One – to – One Function: Any function in which each range value is paired with only one domain value.

Every One to One function has an inverse function**.**

Note: **A function has an inverse function** only if no horizontal line can intersect more than one point of the function. *An inverse function of a function* f *is denoted* f^{-1}.

Determine the inverse function.

1. Replace the function notation with "y".
2. Switch the x and y variables.
3. Solve for "y".
4. Rewrite back in to **inverse function** notation.

$g(x) = 2x - 11$

$f(x) = (x-10)^3 + 6$

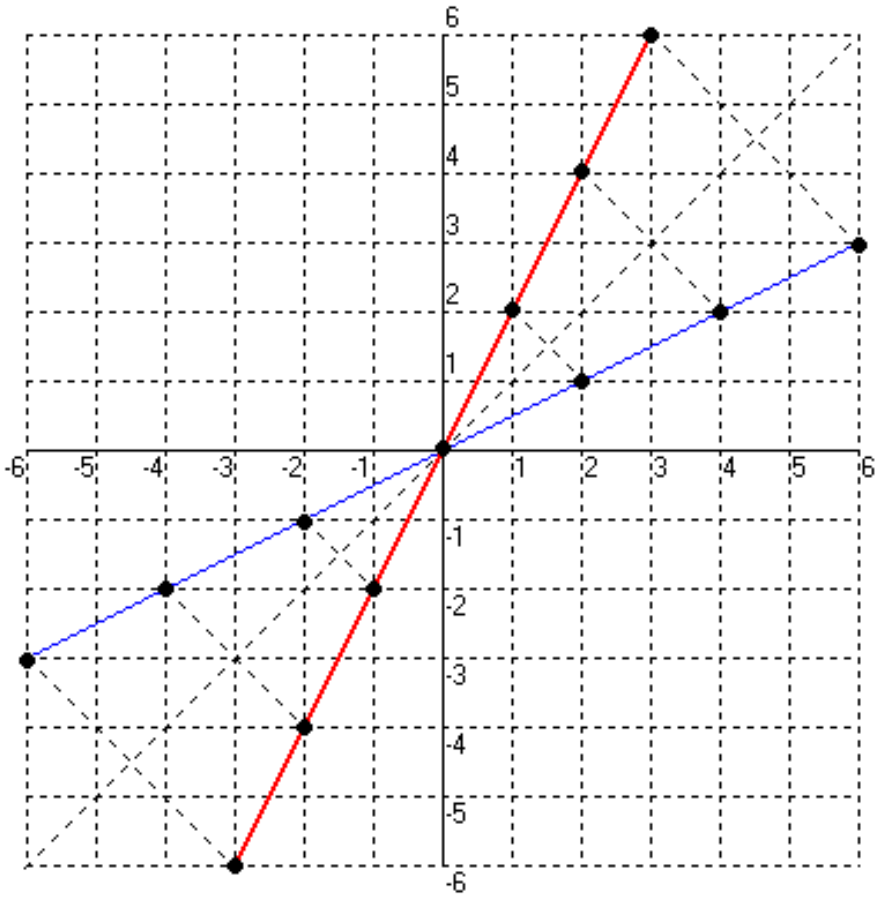
$g(x) = 4\sqrt{x} + 5$

$h(x) = \dfrac{x - 3}{x + 5}$

If f *and* g *are inverse functions, then* $f(g(x)) = x$ *and* $g(f(x)) = x$.

$f(x) = 6x - 1$ & $g(x) = \dfrac{x+1}{6}$

$r(x) = \sqrt[5]{x} + 4$ & $t(x) = (x-4)^5$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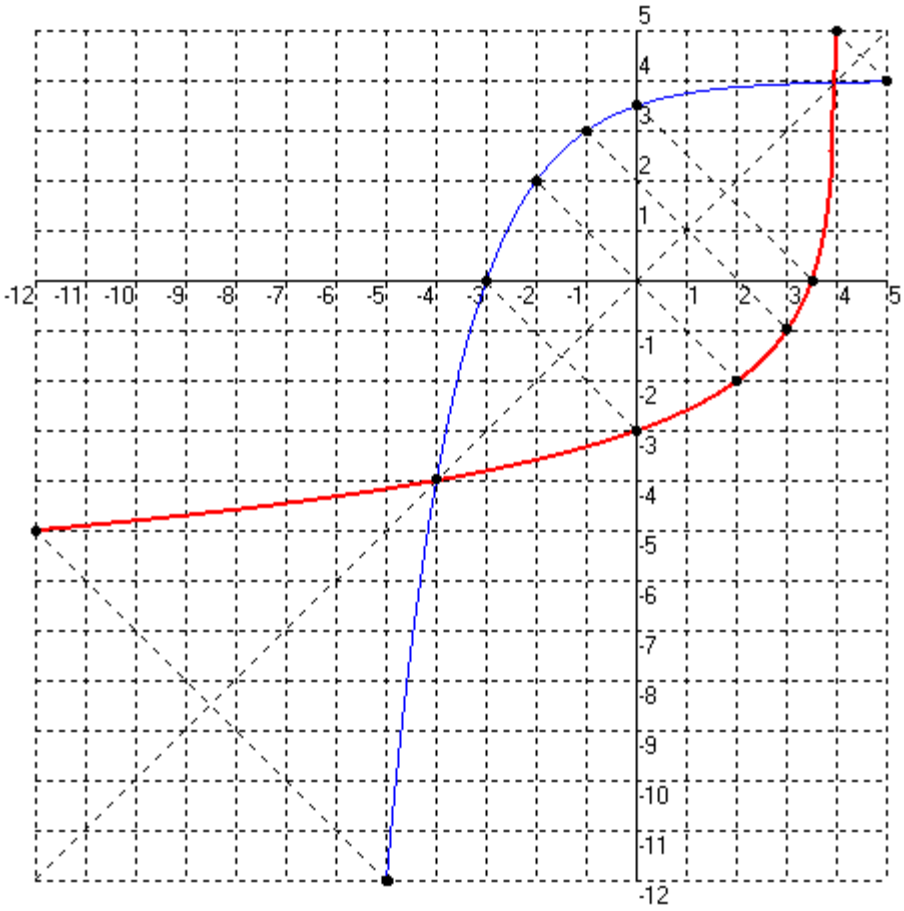
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