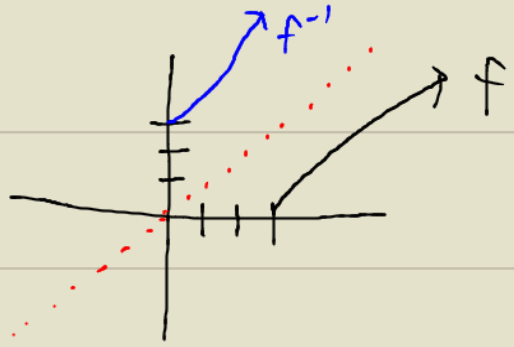
11. $f(x) = \sqrt{x^2 - 9}$, $x \geq 3$



① $y = \sqrt{x^2 - 9}$

② $x = \sqrt{y^2 - 9}$

③ $x^2 = \left(\sqrt{y^2 - 9}\right)^2$

$x^2 = y^2 - 9$

$x^2 + 9 = y^2$

$\pm\sqrt{x^2 + 9} = y$

④ $f^{-1}(x) = \pm\sqrt{x^2 + 9}$

"y"

⑤ $f^{-1}(x) = \sqrt{x^2 + 9}$, $x \geq 0$

12. $f(x) = \sqrt[3]{x + 2}$

① $y = \sqrt[3]{x + 2}$

② $x = \sqrt[3]{y + 2}$

③ $x = (y + 2)^{\frac{1}{3}}$ ← ODD

$x^{\frac{3}{1}} = \left[(y + 2)^{\frac{1}{3}}\right]^{\frac{3}{1}}$

$x^3 = y + 2$

$x^3 - 2 = y$

④ $f^{-1}(x) = x^3 - 2$