1. Determine whether the function $f = \{(1,3),(2,5),(-3,6),(4,3)\}$ is invertible. If not, remove points so that it is. In either case, write out the inverse.

2. Take f to be an invertible function with domain $(4,10]$ and range $(-4,3)$. Determine the domain and range of the inverse of f.

3. Sketch $f|_{(-3,-2)\cup[0,1]}$ where $f(x) = x^2$. Then sketch the inverse of $f|_{(-3,-2)\cup[0,1]}$ and write a formula for it.

4. Find the inverse of $f(x) = 3(x-2)^3 + 1$. Determine the domain and range of f and its inverse.

5. Find the inverse of $f(x) = \frac{x-3}{2x+4}$. Determine the domain and range of f and its inverse.

6. Find the inverse of $f(x) = \sqrt{x-2} + 1$. Determine the domain and range of f and its inverse.