**Exercise 3.143.** [1x6]Let  $f: \mathbb{R} \to \mathbb{R}$  be bijective, and  $F \subset \mathbb{R}^2$  its graph; let  $f^{-1}$  be the inverse of f and let G be its graph; show that G is the symmetric of F with respect to the bisector of the first and third quadrants.