(1) Prove that every rotation is a rigid motion. Hint: You must use the definitions of these terms directly.

(2) Using the figure below, evaluate each rigid motion at the given point.
(a) $\tau_{CH}(C)$  
(b) $\tau_{FH}(B)$  
(c) $R_{K,-\pi/2}(H)$  
(d) $R_{E,\pi}(D)$  
(e) $\rho_{HD}(E)$  
(f) $\rho_{CA}(B)$

(3) Calculate the following compositions of rigid motions. All of these rigid motions refer to the figure below, in which you should assume that all the quadrilaterals that appear to be squares really are squares.
(a) $\tau_{DC} \circ \tau_{ED}$  
(b) $\tau_{AD} \circ \tau_{CE}$  
(c) $\rho_{DF} \circ \rho_{KF}$  
(d) $\rho_{FH} \circ \rho_{BD}$  
(e) $\rho_{BE} \circ \rho_{FH}$  
(f) $\rho_{FH} \circ \rho_{AD}$