Let \( X = \{x_1, x_2, x_3, x_4\}, Y = \{y_1, y_2, y_3, y_4\}, Z = \{z_1, z_2, z_3\} \), and define \( f : X \to Y \), \( g : Y \to Z \), \( h : Z \to X \) by \( f(x_1) = y_1 \), \( f(x_2) = y_3 \), \( f(x_3) = y_4 \), \( f(x_4) = y_2 \), \( g(y_1) = z_1 \), \( g(y_2) = z_1 \), \( g(y_3) = z_3 \), \( g(y_4) = z_2 \), \( h(z_1) = x_1 \), \( h(z_2) = x_2 \), and \( h(z_3) = x_4 \). Find \( h \circ g \) and \( g \circ f \). Is \( f \) one-to-one, onto, or invertible? How about \( g \) and \( h \)? Find the inverse functions of whatever functions are invertible.