160. Let $X_1, ..., X_n$ be IID normal(θ, σ^2) where σ^2 is known. For each of the following hypotheses, write the acceptance region of a level α test and the $1 - \alpha$ confidence interval that results from inverting the test.

(a) $H_0 : \theta \leq \theta_0$ versus $H_1 : \theta > \theta_0$.

(b) $H_0 : \theta \geq \theta_0$ versus $H_1 : \theta < \theta_0$.

(c) $H_0 : \theta = \theta_0$ versus $H_1 : \theta \neq \theta_0$.