1. $X = X_1 X_0$ and $Y = Y_1 Y_0$ are 2-bit binary numbers. The Boolean function S that satisfies the condition "If $X > Y$, then $S = 1$", in its minimized form, is

   (a) $X_1 Y_1 + X_0 Y_0$

   (b) $X_1 \bar{Y}_1 + X_0 \bar{Y}_0 \bar{Y}_1 + X_0 \bar{Y}_0 X_1$

   (c) $X_1 \bar{Y}_1 X_0 \bar{Y}_0$

   (d) $X_1 Y_1 + X_0 \bar{Y}_0 Y_1 + X_0 \bar{Y}_0 \bar{X}_1$