75 (a) Since the data is leveling off rather than increasing at a faster rate, the function f_2, which contains a logarithmic expression, should model the data better than f_1.

(b) Let $Y_1 = 9.2(1.03)^{(X-1997)}$ and $Y_2 = 9.2 + \ln(X - 1996)$. Their graphs together with the data is shown in *Figure 75*. Since $Y_2 = f_2(x)$ levels off like the data, it should model future trends better than $Y_1 = f_1(x)$, which will continue to increase exponentially.

[1996, 2007, 1] by [8, 12, 1]

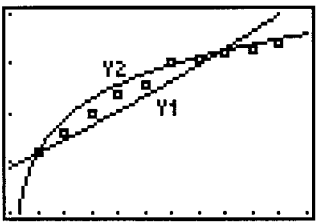

Figure 75