

- 63 (a) The slope of the graph of P is 3421. This means that the median price of a single-family home has increased by approximately \$3421 per year.
- (b) Graph $Y_1 = 3421X + 61000$, $Y_2 = 71000$, $Y_3 = 88000$. The graphs are shown in *Figure 63*. The points of intersection are located near $(2.92, 71,000)$ and $(7.89, 88,000)$. For approximately $2.92 \leq x \leq 7.89$ or, rounded to the nearest year, between 1983 and 1988, the median price was between \$71,000 and \$88,000. (Note that $x = 0$ corresponds to 1980.)
- (c) To solve this symbolically we must solve the following inequality.

$$\Rightarrow 71,000 \leq 3421x + 61,000 \leq 88,000$$

$$\Rightarrow 10,000 \leq 3421x \leq 27,000$$

$$\Rightarrow \frac{10,000}{3421} \leq x \leq \frac{27,000}{3421}$$

$$\Rightarrow 2.92 \leq x \leq 7.89 \quad \{\text{Approximate}\}$$

Rounded to the nearest years, this is between 1983 and 1988, inclusively.

$[0, 10, 1]$ by $[50,000, 100,000, 10,000]$

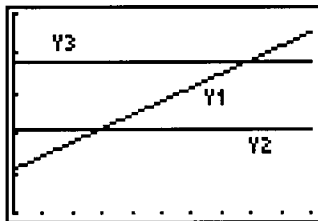


Figure 63