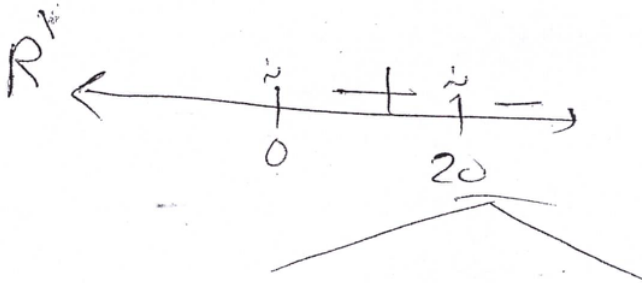


$$X = \frac{240 \mp \sqrt{(-40)^2 - 4(-3)(2000)}}{2(-3)} = \frac{40 \mp 160}{-6}$$

~~$X = 40 \mp 160$~~

$$= -33.3, 20$$

X : number of units
 الإيراد الكلي = السعر × الكمية
 الإيراد = السعر × الكمية



→ the level of sales that maximizes revenue
 $X = 20$

$$\rightarrow \text{max. revenue} = R(20) = 24000$$

~~12) If the club members charge 5\$ admission to a classic car show, 1000 people will attend. For each 1\$ increase in price, 100 fewer people will attend. What price gives the maximum revenue? Find the max. revenue?~~
~~1000 people → 5\$~~
~~→ 6\$~~

12) If club members charge 5\$ admission to a classic car show, 1000 people will attend, and for each 1\$ increase in price, 100 fewer people will attend, what price will give the maximum revenue? Find the maximum revenue?