

Correct. Let t = the number of orchestra tickets sold and b = the number of balcony tickets sold. Then

$$t + b = 980$$

$$50t + 35b = 44,350$$

Multiply the first equation by -50 : $-50t - 50b = -49,000$

Add this to $50t + 35b = 44,350$: $-15b = -4,650$

Divide both sides by -15 : $b = 310$