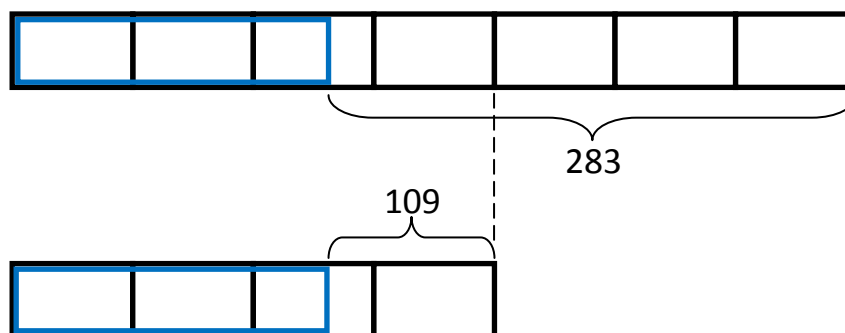


Weekly Question (6 Mar)

At the start of a concert, the ratio of the number of ladies to the number of gentlemen was 7 : 4. During the intermission, 283 ladies and 109 gentlemen exited the concert hall. In the end, there were **as many ladies as gentlemen**. What was the total number of people remaining at the concert?

Solution:

	<u>Ladies</u>	: <u>Gentlemen</u>
Start of Concert	7 units	: 4 units
Intermission	-283	-109
In the end	1	: 1



$$7 \text{ units} - 283 \rightarrow 4 \text{ units} - 109$$

$$3 \text{ units} \rightarrow 283 - 109 = 174$$

$$1 \text{ unit} \rightarrow 58$$

$$4 \text{ units} - 109 = (4 \times 58) - 109$$

$$= 123 \text{ gentlemen (in the end)}$$

$$123 \times 2 = \mathbf{246}$$

Ans: There were 246 people remaining at the concert.