

Conditions

Two groups of friends arrived at the ice skating rink. Jenny arrived with the second group and did not hear the wait time, but she heard someone say that the total of the two groups' wait time was 1 hour, 20 minutes. Jenny's group had a wait time three times as long as the group who arrived first. Jenny was trying to decide if she felt like waiting that long to skate. How long were the wait times for each group?

Solution

Let's the Jenny's group waiting time was X . Then the waiting time for 1st group was 3 times longer = $3 \cdot x$. And the total time for 2 groups is 1h20min.

$$x + 3x = 80 \text{ min}$$

$$4x = 80, x = 20$$

Answer: Jenny's group has waiting for 20 min, the other group has waiting for $20 \cdot 3 = 60$ min. Together – 80 min or 1 h 20 min.