The Last Assembly

There was an end of the year assembly in a school gymnasium. All but 105 students were 5th graders. All but 120 students were 6th graders. All but 155 students were 7th graders, and all but 175 students were 8th graders. How many students were at the assembly and how many students of each grade were in the gymnasium for the end of the year assembly?

Make sure you include the total number of students and the number of 5th, 6th, 7th, and 8th graders in your answer. Include an explanation as to how you determined the correct response, and any formulas you may have used. You must give an accurate explanation. Have fun. I hope you have enjoyed these problems this year. I will be looking forward to providing challenging problems next school year. Did you know that Venus is the hottest planet in our Solar System even though it isn’t closest to the Sun? 

Dr. Fracaro