

### **Hint for Problem 173**

While you could simply display partitions of 7 into three parts and partitions of 10 into three parts, we hope you won't. Perhaps you could write down the partitions of 4 into two parts and the partitions of 5 into two distinct parts and look for a natural bijection between them. So the hope is that you will discover a bijection from the set of partitions of 7 into three parts and the partitions of 10 into three distinct parts. It could help to draw the Young diagrams of partitions of 4 into two parts and the partitions of 5 into two distinct parts.