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Reading Assignment 12
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In Activity 24.2 we found that the relation $\sim_H$ splits up the group G into partitions. One of these partitions is $\{[2], [6]\}$. In general, for some element $g \in G$, $[g]$ is the set of elements related to g. The collection of these sets partitions G. There are some repetitions in the partitions, since there are exactly two elements in each partition and so there will be four partitions that are equal to an earlier partition. These repetitions are, $[[0]] = [[4]]$, $[[1]] = [[5]]$, $[[2]] = [[6]]$, and $[[3]] = [[7]]$.

The main purpose of this activity was to show how relations can be used to break a group into partitions.