

1. Consider the weighted voting system with three players shown below:

$$[10 : 8, 6, 3]$$

Find the *Shapley-Shubik power distribution* of this weighted voting system. That is, find $SSI(P_1)$, $SSI(P_2)$, and $SSI(P_3)$.

Find the Shapley-Shubik power distribution of this system.

2. Suppose in a family with 2 parents and 2 children, the two parents alone can pass a motion, but in order for the children to pass a motion, both children and one of the parents need to vote yes. How much power does each family member have?