- **Q.1.** A fast- food concession stand sells hotdogs and hamburgers.
 - Daily sales can be as high as 300 hamburgers and hot dogs combined.
 - The stand has room to stock no more than 200 hot dogs and no more than 150 hamburgers.

Determine the possible combination of hamburgers and hot dogs.

- Step.1. Define the variables.
- Step.2.Describe the restrictions on the variables in this situation. (Domain & Range)
- Step.3. Write a system of inequalities that models this situation.
- Step.4. Graph the system (as explained in 6.2) to determine the solution set.
- Step.5. Interpret the solution.

- **Q.2.** A student council is ordering signs for the spring dance. Signs can be made in letter size or poster size.
 - No more than 15 of each size are wanted.
 - At least 15 signs are needed altogether.

Determine the possible combination of both the sizes of signs.

- Step.1. Define the variables.
- Step.2.Describe the restrictions on the variables in this situation. (Domain & Range)
- Step.3. Write a system of inequalities that models this situation.
- Step.4. Graph the system (as explained in 6.2) to determine the solution set.
- Step.5. Interpret the solution.