When designing a resistance training program, the number of sets used for each exercise is an important variable. For strength development, three to six sets have proven to be most productive. The number of sets used for each exercise will produce part of the training stimulus for muscle tissue. The number of sets for each exercise will also interact with the administrative variable of time needed for workout. Thus, the length of the workout can be determined once the total number of sets and rest periods between sets have been determined. Not all exercises will require the same number of sets during a workout.

Three–four minutes between sets.
Approximate time for this part of the workout: 35–45 minutes

Program A
Primary Exercise: Bench press 6, 4, 2, 2, 4, 6
Assistance exercises: Flys 10, 10, 10
Front raises 10, 10, 10

In Program A, the primary exercise for the chest consists of six sets while the assistance exercises consist of three sets. Varying the number of sets during a workout will also have implications for chronic variables involved with periodization of training.