

Workforce Scheduling

A post office requires different number of full-time employees on different days of the week. The number of full-time employees required on each day is as shown below. Union rules state that each full-time employee must work five consecutive days and then receive two days off. For example, an employee who works Tuesday to Saturday must be off Sunday and Monday. The post office wants to meet its daily requirements using the minimum possible number of full-time employees.

Day	Number of employees required
Monday	17
Tuesday	13
Wednesday	15
Thursday	19
Friday	14
Saturday	16
Sunday	11

Formulate an LP that the post office can use to decide on the number of full-time employees.