**9.10**

The central span of the golden gate bridge is 4200 ft long and the towers’ height from the roadway is 500 ft. The shape of the main suspension cables can be approximately modeled by the equation:

By using the equation L, determine the length of the main suspension cables using three-point Gauss quadrature.

Table for 3 point Gauss quadrature

|  |  |
| --- | --- |
| C1 = 0.5555556 | x1 = -0.77459667 |
| C2 = 0.8888889 | x2 = 0 |
| C3 = 0.5555556 | x3 = 0.77459667 |