

Solution 21.22

Trapezoidal/Simpsons rules

$$\begin{aligned} I = & (2-0.5) \frac{336+294.4}{2} + (4-2) \frac{294.4+4(266.4)+260.8}{6} \\ & + (10-4) \frac{260.8+3(260.5+249.6)+193.6}{8} + (11-10) \frac{193.6+165.6}{2} = 2681.192 \end{aligned}$$