

CSE330: Numerical Methods
Assignment 6
15 Marks

1.
 - a) [2 marks] Form an overdetermined system. The system should have at least 3 unknowns.
 - b) [8 marks] Solve it using the QR decomposition method.

2. A function is given by $f(x) = e^{0.5x} + \sin(x)$. Given limit for integration $[0,2]$
 - a. (1 marks) Evaluate the exact integral $I(f)$.
 - b. (4 marks) Compute the numerical integral by using the Newton-Cotes formula with $n = 1$.