On my honor as a student, I have neither given or received aid on this exam

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ME261 M1C

**Problem 1**

*Matrices*

-1 -3 7 1 18

0 -40 75 13 197

0 -27 55 25 211

0 8 -18 1 -34

-1.0000 -3.0000 7.0000 1.0000 18.0000

0 -40.0000 75.0000 13.0000 197.0000

0 0 4.3750 16.2250 78.0250

0 0 -3.0000 3.6000 5.4000

-1.0000 -3.0000 7.0000 1.0000 18.0000

0 -40.0000 75.0000 13.0000 197.0000

0 0 4.3750 16.2250 78.0250

0 0 0 14.7257 58.9029

*Output*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

x(1) = 1.000

x(2) = 2.000

x(3) = 3.000

x(4) = 4.000

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**Problem 2**

*Output*

The calculated coefficients using Least Squares are:

A1 = 4.007

A2 = 2.939

A3 = 1.554

Chart, line chart

Description automatically generated