

HW3

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GitHub: [kenlpetro/Math300_Petro/Python](https://github.com/kenlpetro/Math300_Petro/Python)

1 Question 1

After defining the matrices A and b, `numpy.linalg.solve(A,b)` gave the solution:

$$\begin{bmatrix} -2 \\ 3.5 \end{bmatrix}$$

2 Question 2

I was unable to get matplotlib to display plots, causing me to lose time researching solutions instead of getting the functions right.

3 Question 3

For this question as well I could not get the plots to display.

4 Question 4

I had trouble getting this function to run because of "'float' objects".

5 Question 5

Using `sympy.Symbol('x')` and `function.diff`, I was able to get an answer close to what I found calculating the derivative online, but there seems to be a little difference due to the section with the cosine.