

Octave Tutorial # 5: Let $p(t) = -1 + 3t - 2t^3$ – that is, p is a polynomial. Use Octave to compute the value of p at each of the entries of x . The first entry of this matrix should be $p(7)$ since the first entry of x is 7. The last entry should be $p(2)$ since 2 is the last entry of x .

Solution:

Your solution here!

Octave Tutorial # 7: Plot the curves $y = Ce^x$ for $C = 1$, $C = 1/2$, $C = 0$, $C = -1/2$, and $C = -1$ over the range $-1 \leq x \leq 1$ all in the same figure. Add a helpful legend to your plot. Hand in a printout of your plot.

Solution:

Your code here!

Uncomment the next line and put your own figure in the file.

Octave Tutorial # 9: Let $\text{logistic}(x) = \frac{1}{1 + e^{-x}}$.

- Use Octave to define an inline function `logisitic` for this function.
- Verify that your function works correctly by computing `logistic(0)`, `logisitic(1)`, and `logistic([0, 1])`. Do you obtain the right answers? (Hint: if you have a error when you test with vector input, think about the dot operators `.*`, `./` and so forth.)
- Plot the `logistic` function over the range $-2 \leq x \leq 2$. Add a red square or diamond that marks the point $(1, \text{logistic}(1))$.

Hand in a transcript of the Octave commands you used in parts a) through c) as well as a printout of your plot.

Solution:

Your code here!

Uncomment the next line and put your own figure in the file.