MATH512 - Project 4

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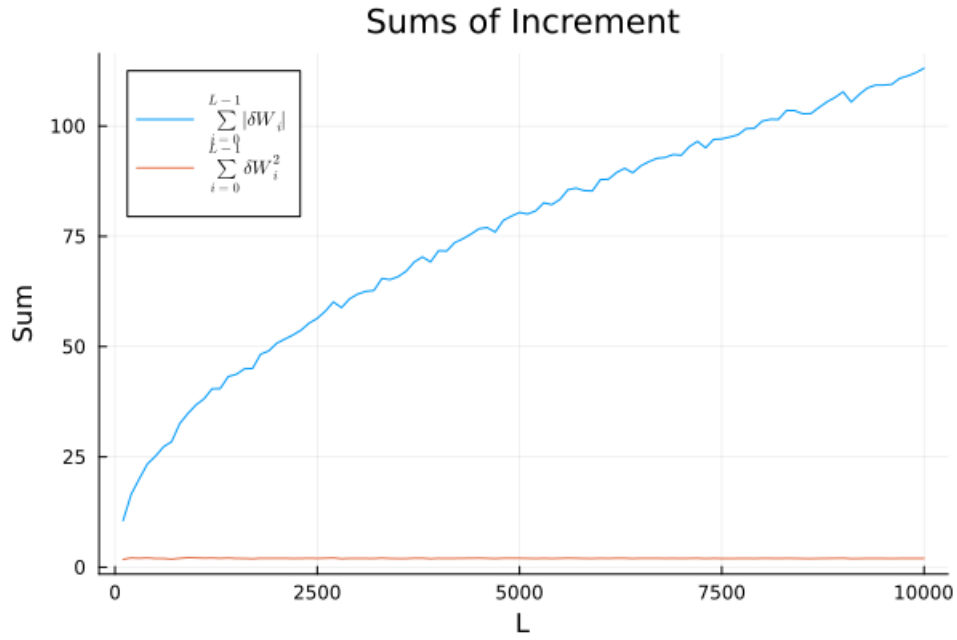
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Question 1

Refer to Figure 1

Figure 1: Stochastic Plots

Notice that as the L parameter increases, the $|\delta W_i|$ term is unbounded while δW_i^2 converges to 2 in probability.
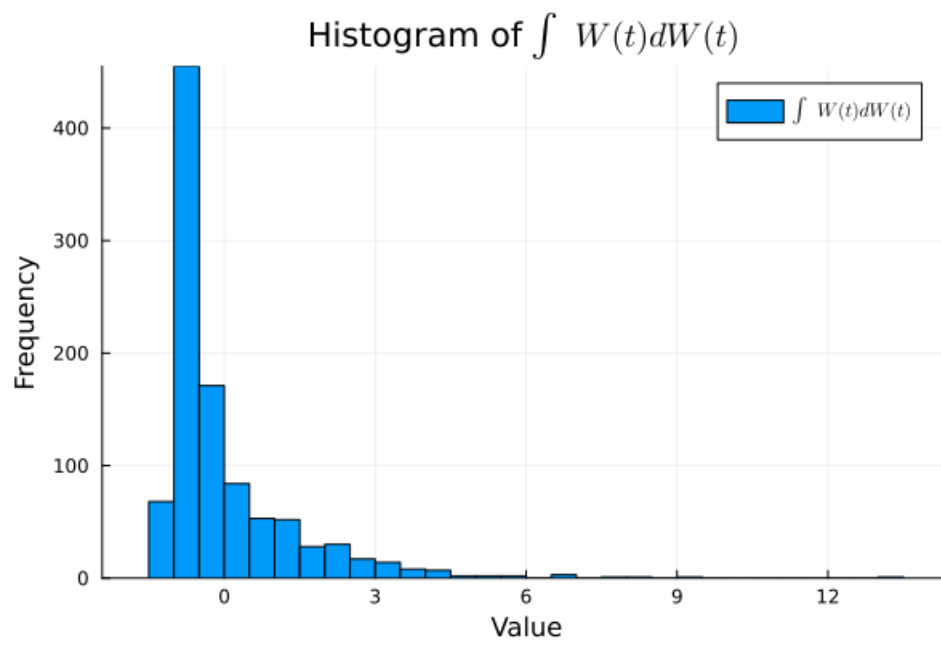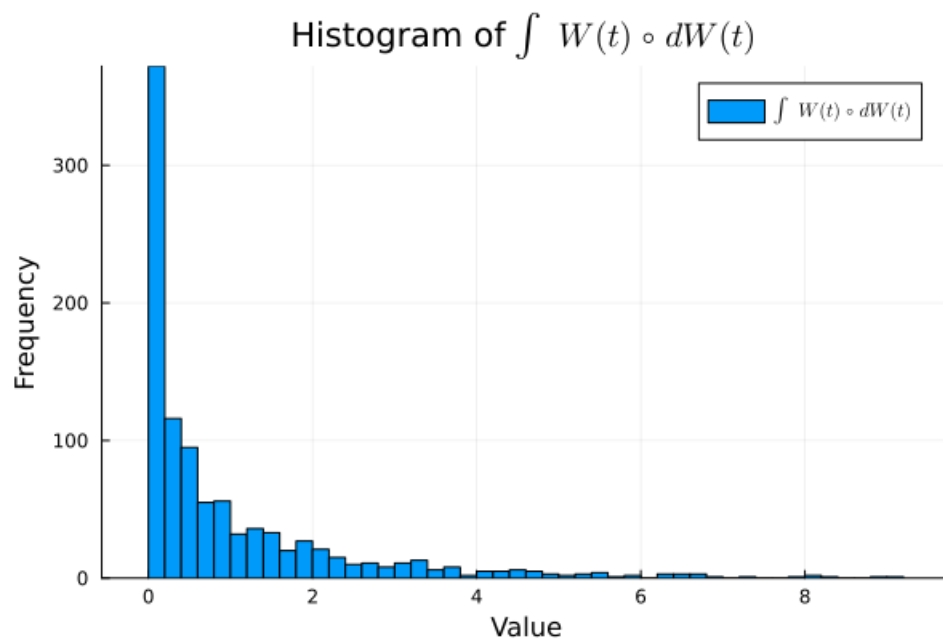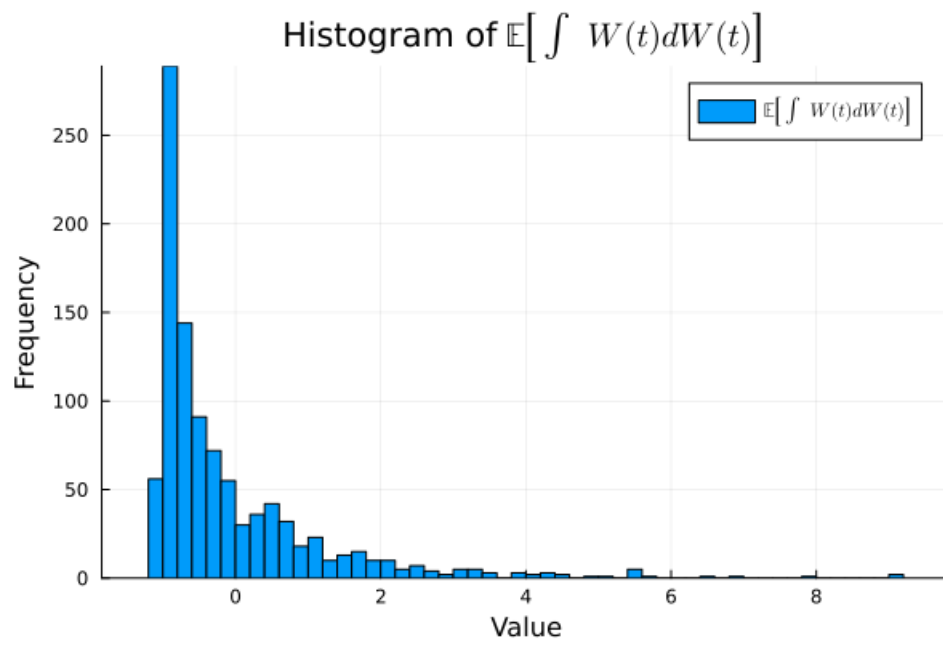
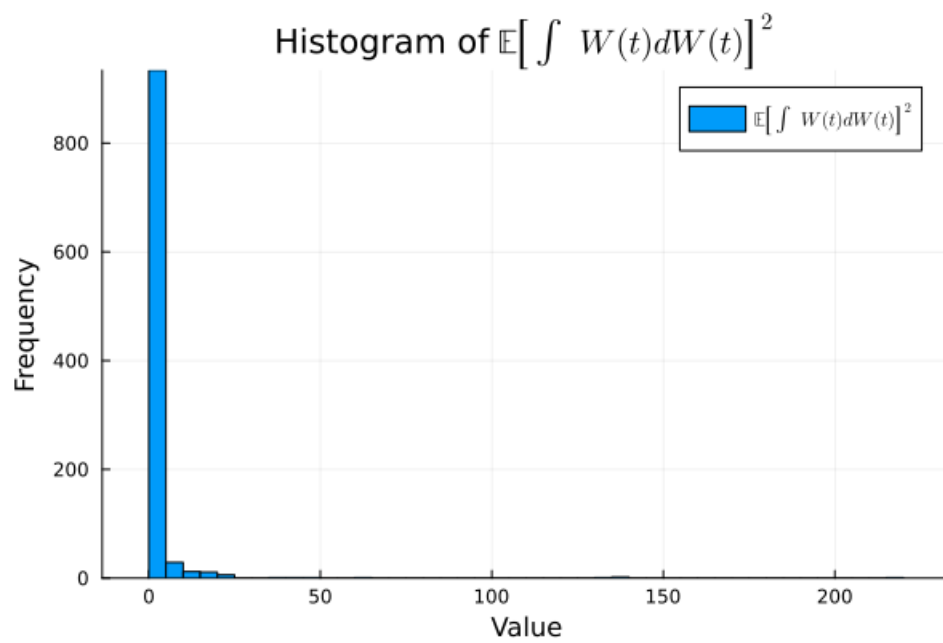# Question 2

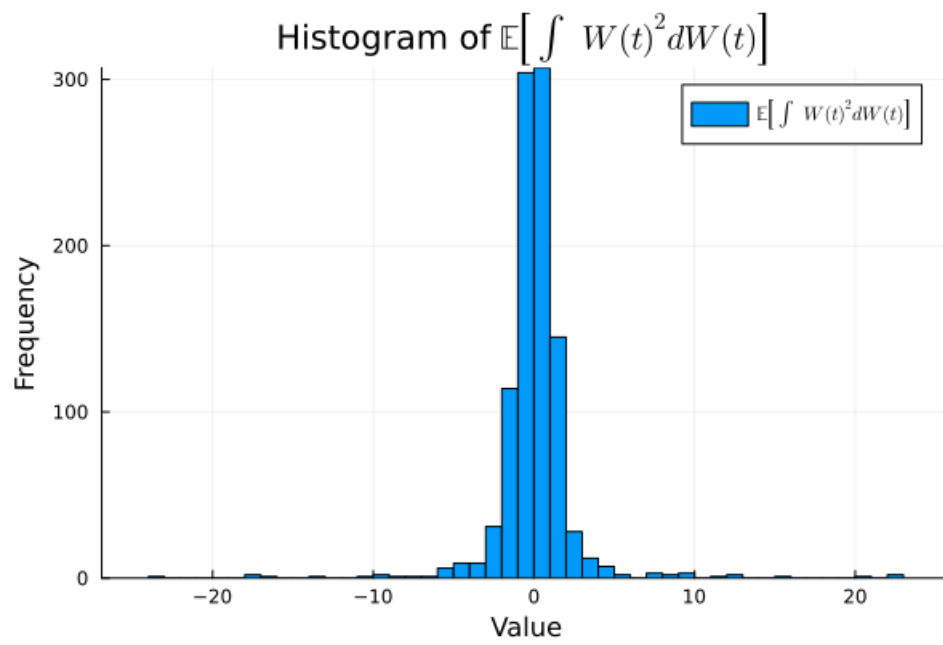Figure 2: 2a

1.

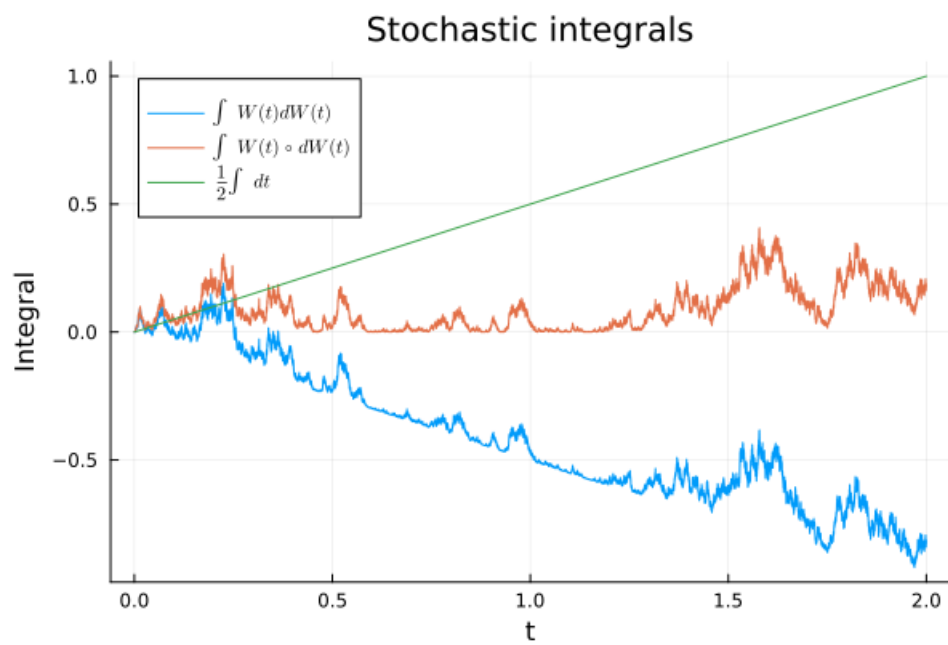Figure 3: 2b

2.

Figure 4: 2c

3.

Figure 5: 2d

4.

Figure 6: 2e
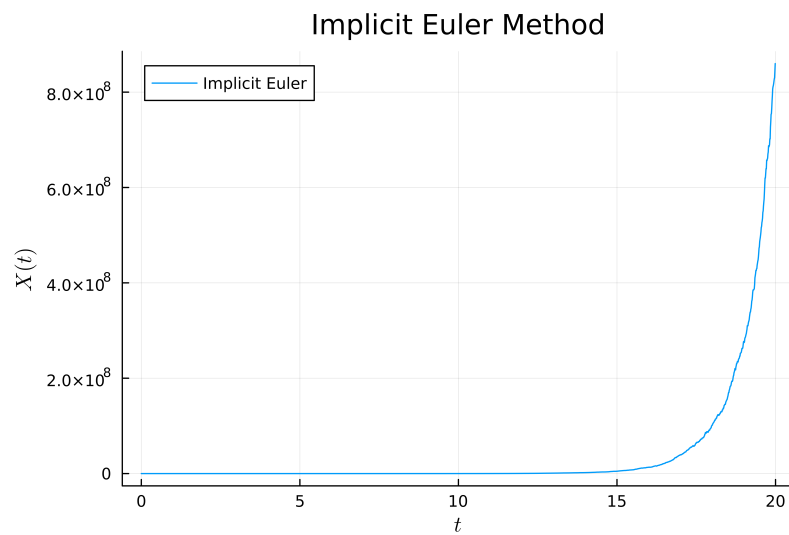
5.

Figure 7: 2f

6.

Question 3

Question 4
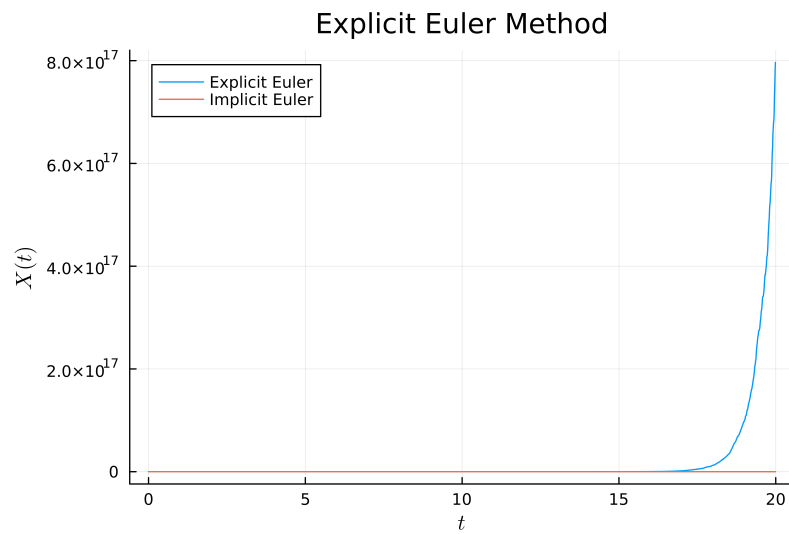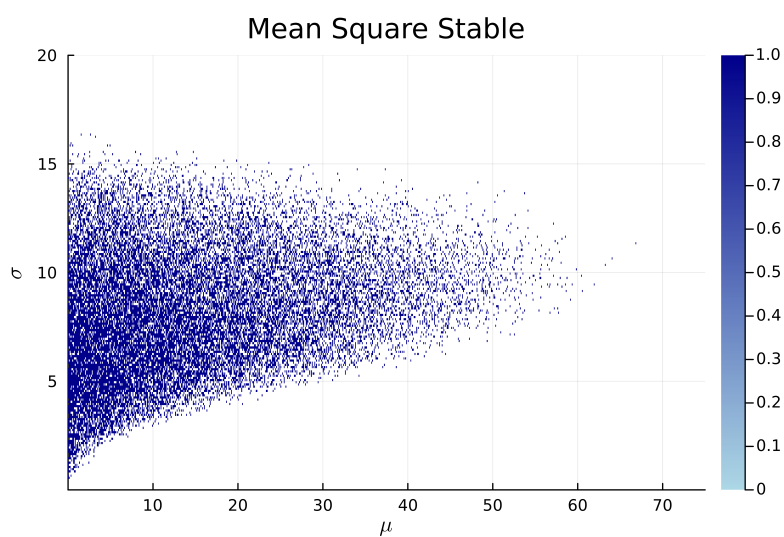

Figure 8: Implicit Euler

Figure 9: Explicit Euler

Figure 10: Mean Square Stable Values

Question 5

Figure 11: 5