MATH 610 PA 2 Report

# Problem 1
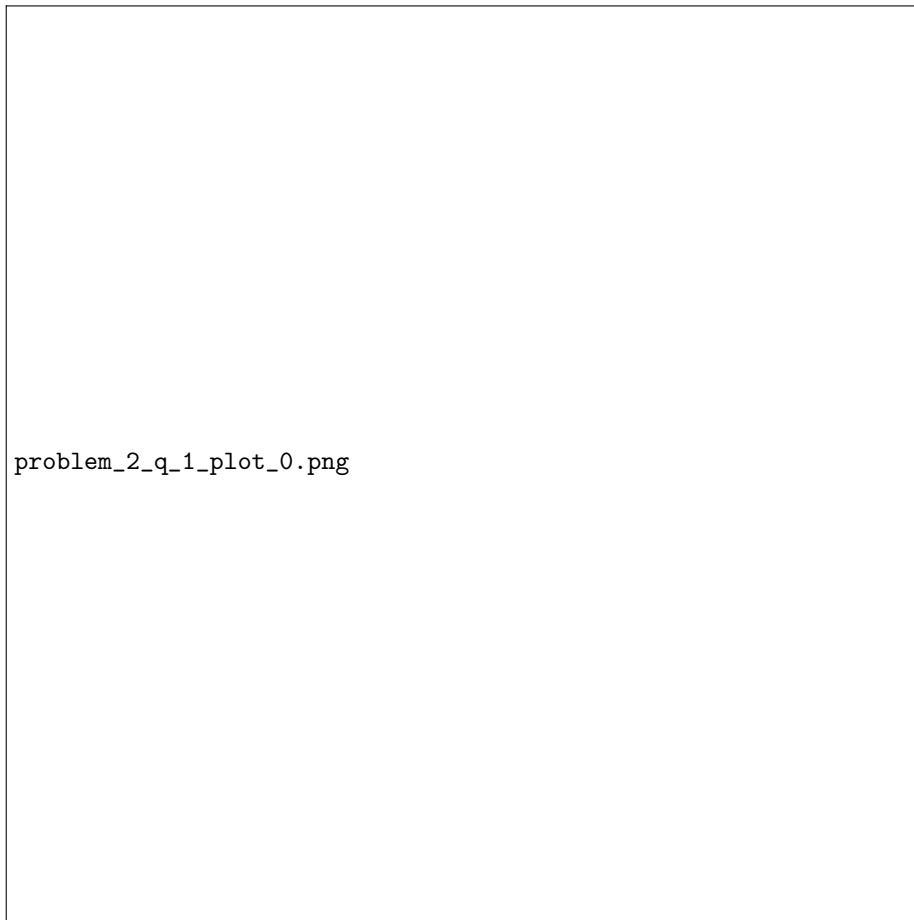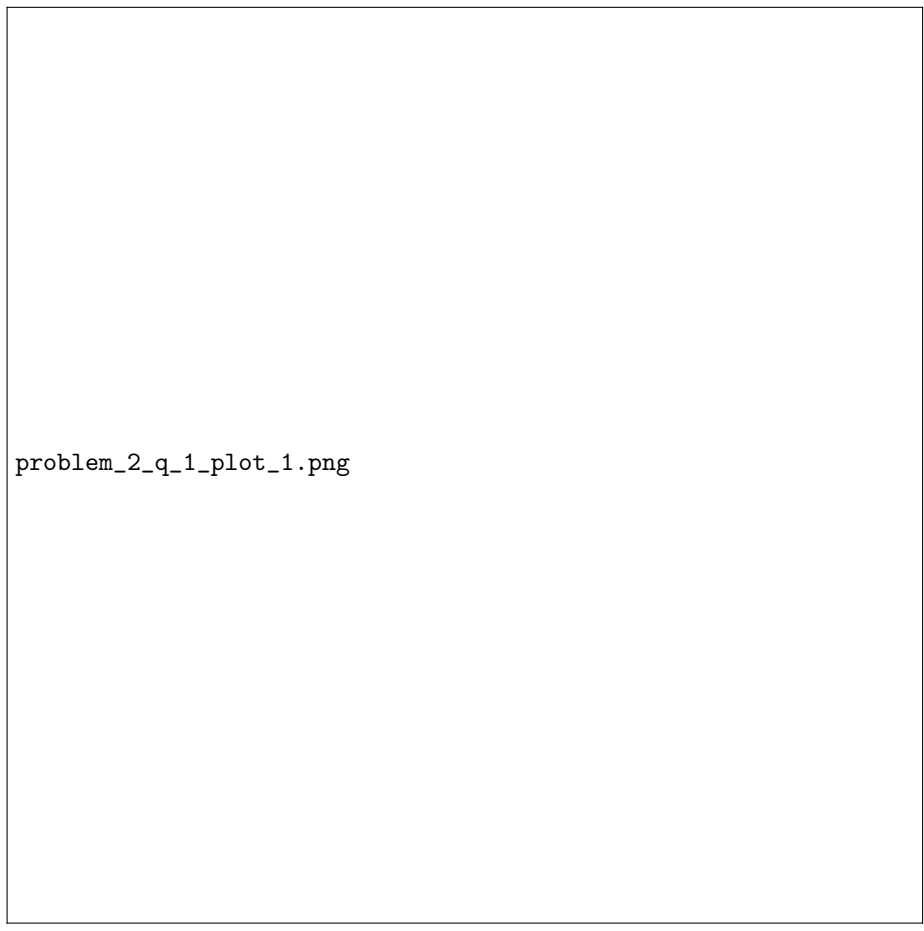
## Solution

problem_1_plot.png
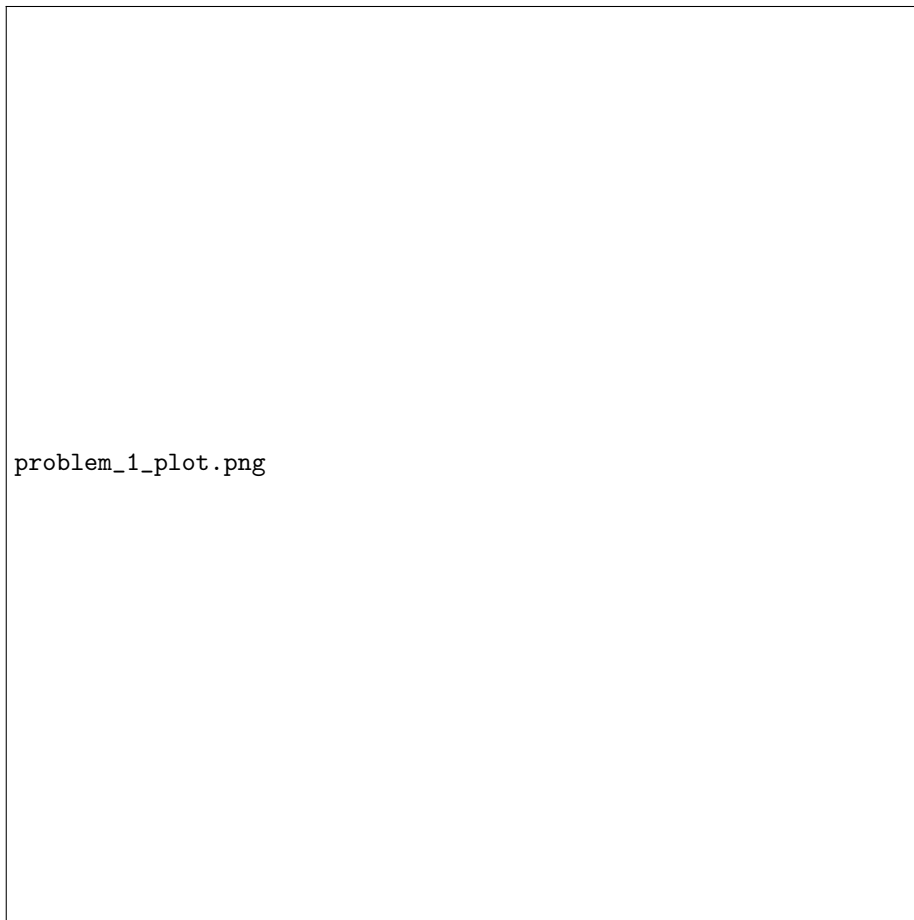
# Errors

problem_1_errors.png

# Problem 2

$q = 1$

problem_2_q_1_plot_0.png
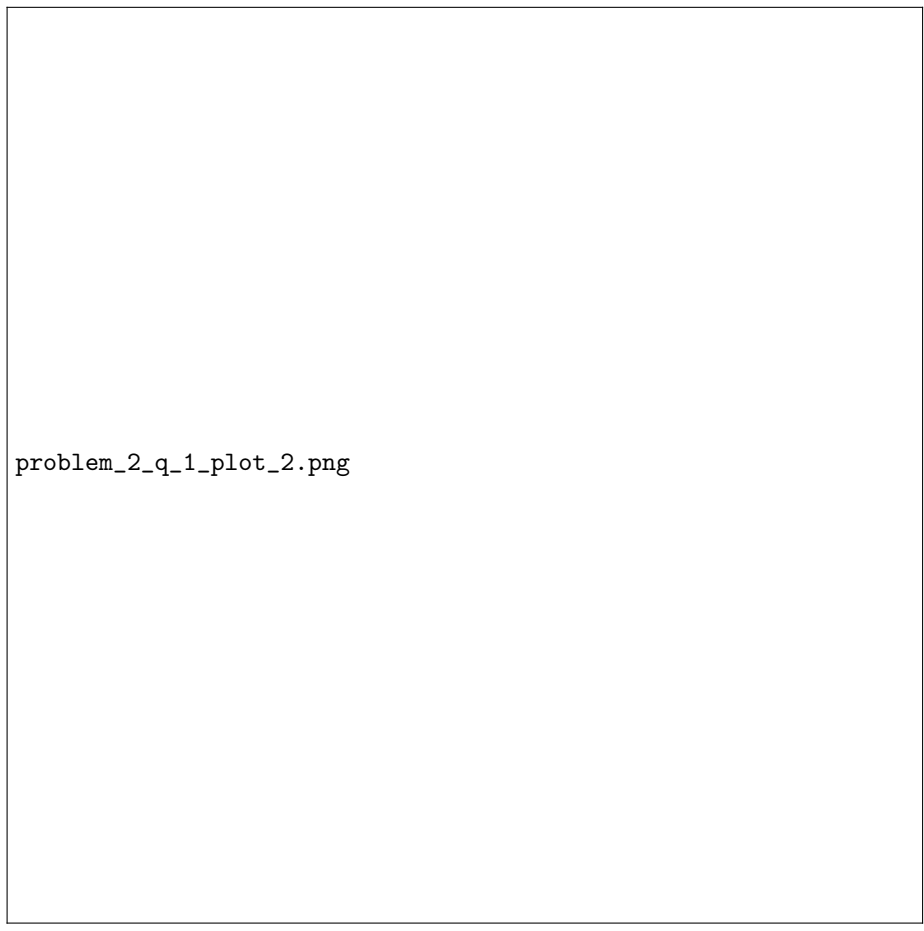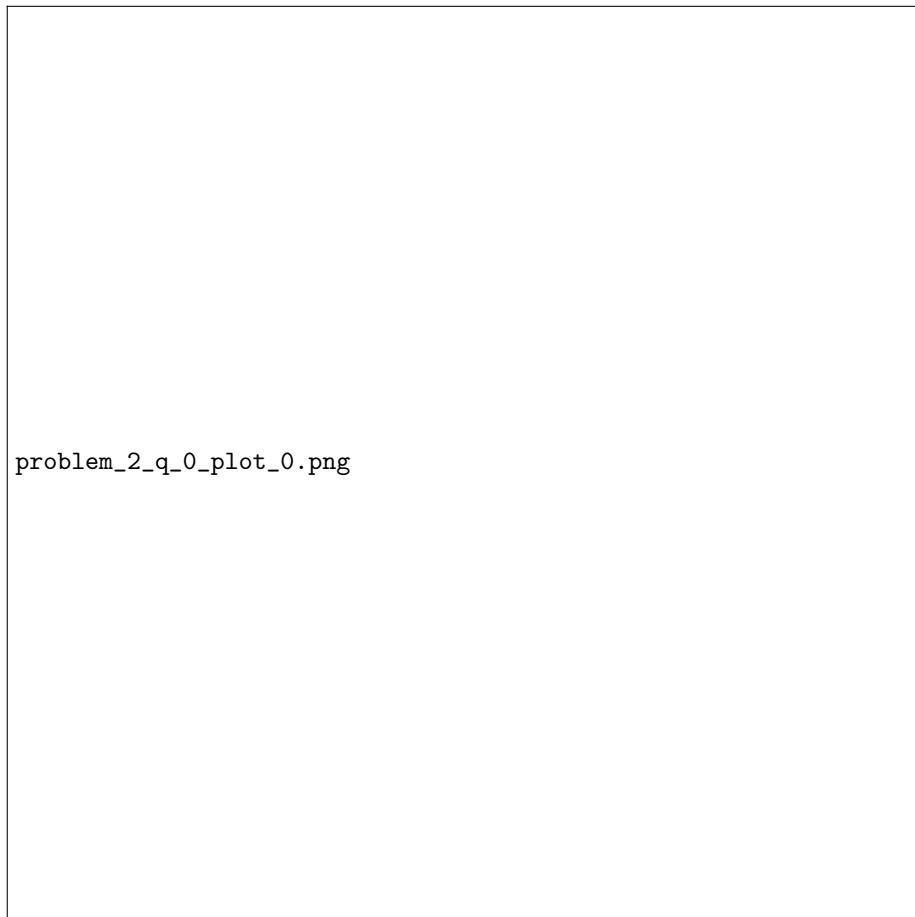
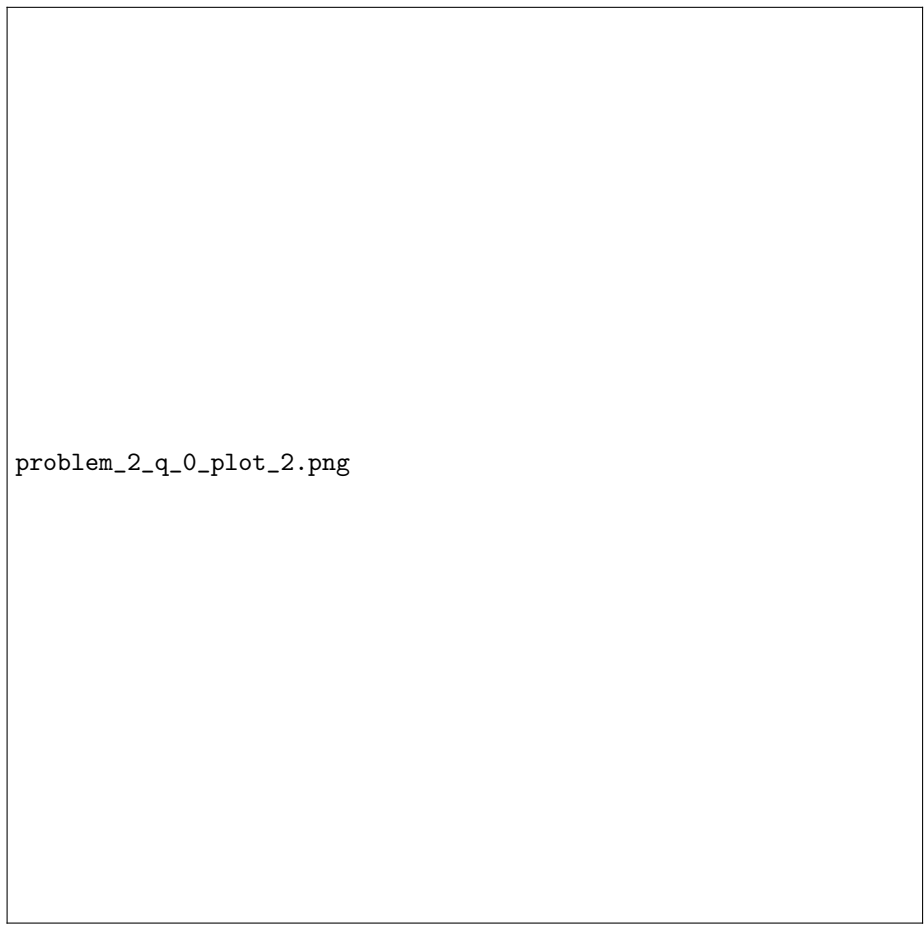problem_2_q_1_plot_1.png

problem_2_q_1_plot_2.png

$q = 0$

problem_2_q_0_plot_0.png

problem_2_q_0_plot_1.png

problem_2_q_0_plot_2.png

# Problem 3

**Manufactured solution**

$$u(x, y) = \cos(\pi x) \cos(3\pi y)$$

**Solution**

problem_3_manufactured.png

## Errors

problem_3_manufactured_errors.png

# Unknown solution

## Solution

problem_3_plot.png