

# Midterm 1

Your Name  
MATH 87 Math Modeling

September 20, 2022

This should be typed as a report, but I'll put some useful things in here for you to consider.

## 1 Here's how you make a section

## 2 Introduction

### 2.1 Here's how you make a subsection

here's one way to make a network diagram, but tikz can be tricky, so you don't have to do it this way.

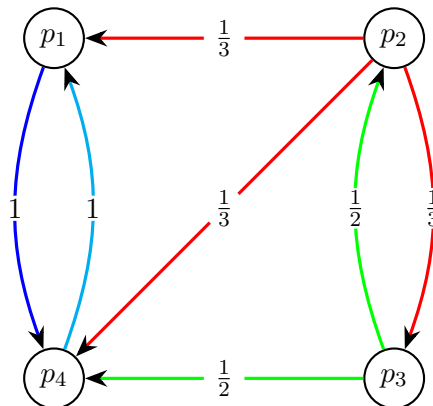


Figure 1: caption for the diagram

Here's how you make a matrix

$$T = \begin{bmatrix} 0 & \frac{1}{3} & 0 & 1 \\ 0 & 0 & \frac{1}{2} & 0 \\ 0 & \frac{1}{3} & 0 & 0 \\ 1 & \frac{1}{3} & \frac{1}{2} & 0 \end{bmatrix}$$

You can write a linear program like this

$$\begin{aligned} \max f(x, y) &= \text{your function} \quad \text{s.t.} \\ &\text{constraint1} \leq \text{value1} \\ &\text{constraint2} \leq \text{value2} \\ &\text{constraint3} \leq \text{value3} \end{aligned}$$

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•	•	•	•	•
•	•	•	•	•
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•	•	•	•	•
•	•	•	•	•

Table 1: Caption for the table

This is how you include the code:

```
include numpy as np
```

```
a=b
```