

## CS 4720/5720 Design and Analysis of Algorithms

Homework # **CHANGE ME!**

Student: (Robert Denim Horton)

**Answers to homework problems:**

## 1. QUESTION 1

- (a) QUESTION 1 a)
- (b) QUESTION 1 b)

Answers:

## 1. ANSWER 1

- (a) ANSWER 1 a)  
Example of matrix in latex;

$$S(t)_{diag} = \begin{bmatrix} S_1(t) & 0.0 & 0.0 & 0.0 & 0.0 \\ 0.0 & S_2(2) & 0.0 & 0.0 & 0.0 \\ 0.0 & 0.0 & S_3(t) & 0.0 & 0.0 \\ 0.0 & 0.0 & 0.0 & S_4(t) & 0.0 \\ 0.0 & 0.0 & 0.0 & 0.0 & S_5(t) \end{bmatrix}$$

- (b) ANSWER 1 b)  
How to use align with equations;

$$S(1) = \begin{bmatrix} 0.01 & 0.0 & 0.0 & 0.0 & 0.0 \end{bmatrix} - 0.8 \begin{bmatrix} 0.99 & 0.0 & 0.0 & 0.0 & 0.0 \\ 0.0 & 1.0 & 0.0 & 0.0 & 0.0 \\ 0.0 & 0.0 & 1.0 & 0.0 & 0.0 \\ 0.0 & 0.0 & 0.0 & 1.0 & 0.0 \\ 0.0 & 0.0 & 0.0 & 0.0 & 1.0 \end{bmatrix}$$

## 2. QUESTION 2

- (a) QUESTION 2 A
- (b) QUESTION 2 B

Answers:

## 2. ANSWER 2

- (a) ANSWER 2 A

(b) ANSWER 2 B

2. QUESTION 3

(a) QUESTION 3 A

(b) QUESTION 3 B

Answers:

2. ANSWER 3

(a) ANSWER 3 A

(b) ANSWER 3 B

2. QUESTION 4

(a) QUESTION 4 A

(b) QUESTION 4 B

Answers:

2. ANSWER 4

(a) ANSWER 4 A

(b) ANSWER 4 B

2. QUESTION 5

(a) QUESTION 5 A

(b) QUESTION 5 B

Answers:

2. ANSWER 5

(a) ANSWER 5 A

(b) ANSWER 5 B