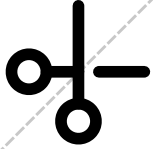


Do not
write here!



Name:

Perm Number:

1

hw3

ME179P W21

Homework Assignment #3

- Use a **DARK** pen or pencil, and write **INSIDE** the answer boxes provided.
- Write your name and perm number **CLEARLY** at the top of **EVERY** page, inside the boxes provided.

Exercise 3.1: Shortest paths and distances on the circle

E3.1(i) Answer:

E3.1(ii) Answer:

2

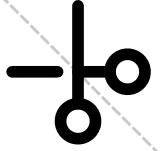
hw3

ME179P W21

Name:

Perm Number:

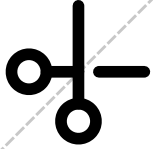
Do not
write here!



E3.1(iii) Answer:

E3.1(iv) Answer:

Do not
write here!



Name:

Perm Number:

3

hw3

ME179P W21

Exercise 3.2: Shortest paths and distances on the 2-torus

E3.2(i) Answer:

E3.2(ii) Answer:

4

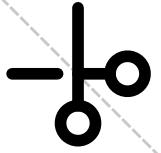
hw3

ME179P W21

Name:

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write here!

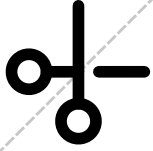


Exercise 3.6: Free configuration spaces

E3.6(i) Answer:

E3.6(ii) Answer:

Do not
write here!



Name:

Perm Number:

5

hw3

ME179P W21

E3.6(iii) Answer: