

Math 240, Quiz 3

Name:

Circle One: T 12:05 T 2:25 R 12:05 R 2:25

Instructions: Answer all questions fully, showing work where necessary.

1) Prove that the product of two rational numbers is rational.

2) Determine whether these statements are true or false (and justify your conclusion).

a) $\emptyset \in \{\emptyset\}$

b) $\{\emptyset\} \in \{\{\emptyset\}\}$

c) $\{\{\emptyset\}\} \subseteq \{\{\emptyset\}, \{\emptyset\}\}$