

Name: _____

EE435 Spring 2012 Quiz 01

1. Midshipman Whatshisname approaches a new fingerprint recognition system we have that controls the lock on the lab door. To use it, he must enter his userid on a keyboard, then place his finger on the sensor. If recognized, the door will unlock. Is this identification or verification? Why?

2. Suppose 40 people have registered in a “Trusted Traveler” system that will allow them to bypass normal security at the airport. Over the course of a year, they have made 400 attempts to use it, of which 395 have been successful. On the other hand, 16 people who were not registered attempted to use it, and 2 were actually successful.

What is the FAR for this problem?

What is the FRR for this problem?

Would you say that this system leans more toward security or convenience of users? Why?

3. A biometric system operates with an EER of 0.25 %. Over one year, there were 11,433 genuine attempts and 747 imposter attempts at entry. How many false accepts and how many false rejects does that represent?

FA = _____

FR = _____

Bonus: Who was the 1st Lord of the Admiralty for Britain during World War I?