

Quiz #4

Your Name:	
SID:	
Circle the letters of your CS162 login: (one per line)	a b c d e f g h i j k l m n o p q r s t u v w x y z a b c d e f g h i j k l m n o p q r s t u v w x y z
TA name / Disc. Section:	
Score:	

This is a **closed book** ten-minute quiz. Write all of your answers directly on this paper.

Good Luck!!

1. True/False Questions. *Circle the correct answer.* (6 points total):

- a. UNIX 4.2 BSD uses a 30-second write-behind policy for all filesystem data (user data and filesystem metadata).

True / False

- b. Transactions provide the following properties: Atomicity, Serializability, Repeatability, Durability.

True / False

- c. Using write-ahead logging avoids the need for a filesystem check at system startup time.

True / False

2. For the following transaction, list the steps that are taken to execute it using write-ahead logging (ignore the actual additions and subtractions). You should include all disk reads/writes and synchronization operations *and* requirements. (14 points)

```
BeginTransaction(x, y, z)
  x = x + 1;
  y = y - 2;
  z = z + 1;
Commit
```

Steps: