

1.
  - Output is 5, final value of x is 5: b1, a1, a2
  - Output is 5, final value of x is 7: Not possible
  - Output is 7, final value of x is 5: Not possible
  - Output is 7, final value of x is 7: a1, b1, a2

Thread A	Thread B
a1: x = 5 a2: print x	b1: x = 7

Select the order of instructions to satisfy the outcomes in the table below. Select "not possible" if the outcome is not possible.

	Final value of x is 5	Final value of x is 7
Output is 5	[ Select ] ▼	[ Select ] ▼
Output is 7	[ Select ] ▼	[ Select ] ▼

2. False. It is determined by other external conditions.

Select all the true statements about the following code. Multiple threads may be executing code using these variables at the same time.

```
// assume all variables are correctly initialized
pthread_mutex_lock(&mutex);
while(num_spaces == 0) {
    pthread_cond_wait(&no_space, &mutex);
}
num_spaces++;
pthread_mutex_unlock(&mutex);
```

## Question 2

1 pts

num\_spaces can not be 0 when pthread\_cond\_wait returns

☐ True

☐ False