**Homework 3**

706107402 Juwon Lee

**Exercise 1**

. (\*)

.

(\*) . QED

**Exercise 2**

1. , and .

Then .

Thus, , so that . QED

1. So that . QED

**Exercise 3**

1. .

차트, 도표이(가) 표시된 사진

자동 생성된 설명

For , .

Let subject to .

If we know ,

Then we can find any such that .

.

1. .

Let , then .

Then we can find as above by using .

**Exercise 4**

1. Table

Portfolio () 0.67% 2.37%

ABC Company () 1.25% 2.95%

1. .
2. .

* .

1. ,

.

1. .
2. .
3. ,

.

Thus, .

**Exercise 5**

1. subject to .

Show that .

.

, , .

,

,

.

Because ,

QED

1. Claim

.

. QED