

```
In [1]: from scipy import stats
sigma = (7.769-2.639)/3
```

```
In [2]: sigma
```

```
Out[2]: 1.7100000000000002
```

```
In [3]: df = (((7.77-2.64)/3)**2)/(((7.77/3)**2/9)+((-2.64/3)**2/24))
```

```
In [4]: df
```

```
Out[4]: 3.760362934914624
```

```
In [15]: df = 3 # บัด df ขึ้นเป็น 4
```

```
In [16]: left = (df*1.710)/stats.chi2.isf(0.05/2,df)
right = (df*1.710)/stats.chi2.isf(1-(0.05/2),df)
```

```
In [17]: left
```

```
Out[17]: 0.5487567949604475
```

```
In [19]: right
```

```
Out[19]: 23.772530787621047
```

```
In [20]: print('interval is',[left,right])
```

```
interval is [0.5487567949604475, 23.772530787621047]
```

**Variance Component ของ batch(supplier) = 1.71 & 95 c.i.
คือ (0.549, 23.77)**