**MA4605 Laboratory A (Week 1) Commentary**

**Part 2 Basic Calculations**

```
>  256/146
[1] 1.753425
>
> pi * 4
[1] 12.56637
>
>  3.14^2
[1] 9.8596
>
>  log(4.11)
[1] 1.413423
>
>  log(4.11,2)
[1] 2.039138
>
>  factorial(6)
[1] 720
```

**Part 4 Calculations on Vectors**

- Mean
- Standard deviation
- Summation
- Median
- Length (i.e. Sample Size)

- Summary (here , the quantiles)
- Variance
- Product
- Interquartile Range (Q3-Q1)

```
> X = c(0.07, 0.07,0.08,0.07,0.07,0.08,0.08,0.09,0.08)
>
> mean(X)
[1] 0.07666667
>
> sd(X)
[1] 0.007071068
>
> sum(X)
[1] 0.69
>
> length(X)
[1] 9
>
> summary(X)
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
0.07000 0.07000 0.08000 0.07667 0.08000 0.09000
>
> var(X)
[1] 5e-05
>
> prod(X)
[1] 8.851046e-11
>
```

```
> IQR(X)
[1] 0.01
```