R Notebook

#Define Sets

```
A <- c(1,3,5,7,9)
B <- D <- c(1,5,7)
```

##Intersection

```
intersect(A,B)
```

```
## [1] 1 5 7
```

##Union

```
union(A,B)
```

```
## [1] 1 3 5 7 9
```

##Set Difference or Relative Complement

```
setdiff(A,B)
```

```
## [1] 3 9
```

##Set Equal

```
setequal(A,B)
```

```
## [1] FALSE
```

```
setequal(B,D)
```

```
## [1] TRUE
```

##Subset

```
is.element(B,A)
```

```
## [1] TRUE TRUE TRUE
```

```r
is.element(A,B)
```

```
## [1]  TRUE FALSE  TRUE  TRUE FALSE
```

```r
all(is.element(B,A))
```

```
## [1] TRUE
```

##Checking wheter x is an element of the set y

```r
10 %in% A
```

```
## [1] FALSE
```