title: “Basics in R” author: “Davis Bundi” date: “1/10/2020” output: pdf_document —

R Markdown

```
#Write a sequence of numbers
 s1<-seq(1,90,5)
 l1<-length(s1)
 l1
```

```
## [1] 18
```

```
# replicate numbers
 r1<-rep(3,4)
 r1
```

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

```
#Concatenate - combine vectors together
 rs<-c(s1,r1)
 rs
```

```
##  [1]  1  6 11 16 21 26 31 36 41 46 51 56 61 66 71 76 81 86  3  3  3  3
```

```
#matrices
library(matlib)
a1<-seq(1,4,1)
A<-matrix(a1, nrow=2, byrow=TRUE)
A
```

```
##      [,1] [,2]
## [1,]    1    2
## [2,]    3    4
```

```
A_inv<-inv(A)
A_inv
```

```
##      [,1] [,2]
## [1,] -2.0  1.0
## [2,]  1.5 -0.5
```

```
A_det<-det(A)
A_det
```

```
## [1] -2
```

```
b1<-seq(2,120,2)
B<-matrix(b1,nrow=6, byrow=TRUE)
B
```

```
##      [,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] [,10]
## [1,]    2    4    6    8   10   12   14   16   18    20
## [2,]   22   24   26   28   30   32   34   36   38    40
## [3,]   42   44   46   48   50   52   54   56   58    60
## [4,]   62   64   66   68   70   72   74   76   78    80
## [5,]   82   84   86   88   90   92   94   96   98   100
## [6,]  102  104  106  108  110  112  114  116  118   120
```

```
#Logical expressions
d1<-c(1,1,1,0)
```

```
d2<-c(1,1,0,0)
dor<-d1 | d2
dand <-d1 & d2
```