

(a)

```
> #(a)
> student1_30 <- math.score[1:30]
> mean(student1_30)
[1] 56.16666667
> sd(student1_30)
[1] 28.45211747
#(a)
```

(b)

```
> #(b)
> pass <- math.score[math.score >= 60]
> length(pass)
[1] 31
> which(math.score>=60)
[1] 1 5 8 11 12 15 17 18 19 21 22 25 27 29 31 32 39 40 44 56 57 58 59 60 61 62 63 66 68 70 74
#(b)
```

(c)

```
> #(c)
> max(math.score)
[1] 100
> min(math.score)
[1] 0
> which(math.score == max(math.score))
[1] 22
> which(math.score == min(math.score))
[1] 3
```

(d)

```
> #(d)
> math.score_sorted = sort(math.score, decreasing = TRUE)
> top10 = math.score_sorted[1:10]
> mean(top10)
[1] 91.1
> sd(top10)
[1] 5.342700108
```

(e)

```
> #(e)
> s <- summary(math.score)
> s["1st Qu."]
1st Qu.
27.75
```