

20

1.

(a)

```
b0 <- Grade_Point_Average_lsfit$coefficients[1]
> b0
```

Intercept

2.114049

```
> b1 <- Grade_Point_Average_lsfit$coefficients[2]
> b1
```

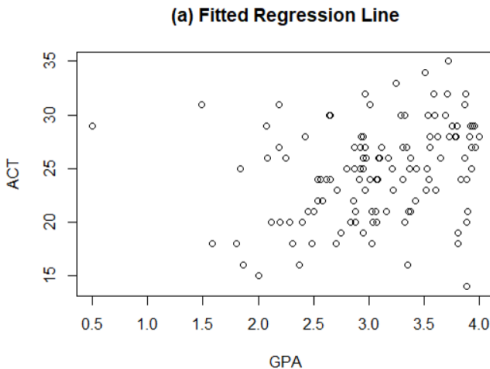
X

0.03882713

Estimated regression function = $2.114049 + 0.03882713X_i$

(b)

```
plot(Grade_Point_Average, main = "(a) Fitted
Regression Line")
```



>

```
abline(Grade_Point_Average_lsfit$coefficients)
```

(c)

```
> X <- 30
```

```
> Y_hat <- b0 + b1 * X
```

> Y_hat
3.278863

X

2.

(a)

Analysis of Variance Table

Response: GPA

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
ACT	20	10.074	0.50368	1.2678	0.2191
Residuals	99	39.332	0.39729		