Test Exercise 1

(a)

Y=-0.3336X+114.2411

Coefficient	SE	P-value
a	3.882078	2.41E-20
b	0.095369	0.001852

(b)
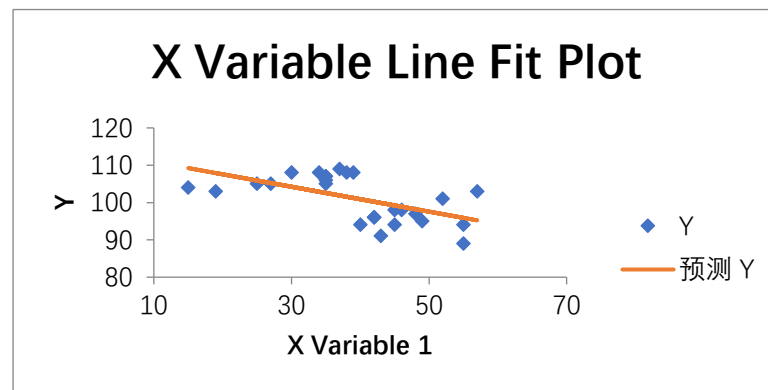
Not perfectly close to a line

(c)

For age <40:

Y=0.197971X+100.2323

Coefficients	SE	P-value
a	1.415896	5.55E-16
b	0.044384	0.000962

For age>=40:

Y=0.146471X+88.87189

Coefficients	SE	P-value
a	9.458464	1.37E-06
b	0.197384	0.473599

(d)

In (a) b is negative while in (c) b is positive.

Lessons learned: be careful about the value of the coefficients change or not among the whole data set.