Test Exercise 1

Y=-0.3336X+114.2411

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



Not perfectly close to a line



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 |



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.