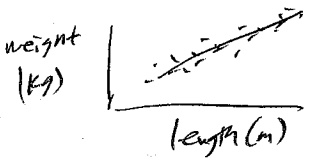
2017Q1



(a) (i) positive: means that, on average, as the length of wolves increase the weight of wolves also increases.

(ii) linear: means that, on average, for every increase in length of 1 meter, wolves weight increases by a constant amount.

(iii) strong: means that on the scatter-plot showing weight vs. length, the data points are located fairly close to the LSRL.

(b) In the given LSRL, slope = 35,02 kg/m
this means that for every 1 additional meter in length, wolf weight increases by 35,02 kg, on average.

(c) $\hat{y} = -16.46 + 35,02x$

$\hat{y} = -16.46 + 35.02(1.4) = 32,568$ kg

residual = $y_{actual} - \hat{y}_{predicted}$

$-9,67 = y - 32,568$

$y = 32,568 - 9,67 =$ **22,898 kg**