

# Kraby, linienie - regresja liniowa

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	prem	postm	wiel	rok	polow
1	113.6	127.7	14.1	NA	0
2	118.1	133.2	15.1	NA	0
3	119.9	135.3	15.4	NA	0
4	126.2	143.3	17.1	NA	0
5	126.7	139.3	12.6	NA	0
6	127.3	140.2	12.9	NA	0

## Opis zmiennych

- 1 **premolt** wielkość pancerza przed linieniem;
- 2 **postmolt** wielkość pancerza po linieniu;
- 3 **wiel** przyrost;
- 4 **rok**
- 5 **polow** 1- komercyjny, 0 - laboratorium.

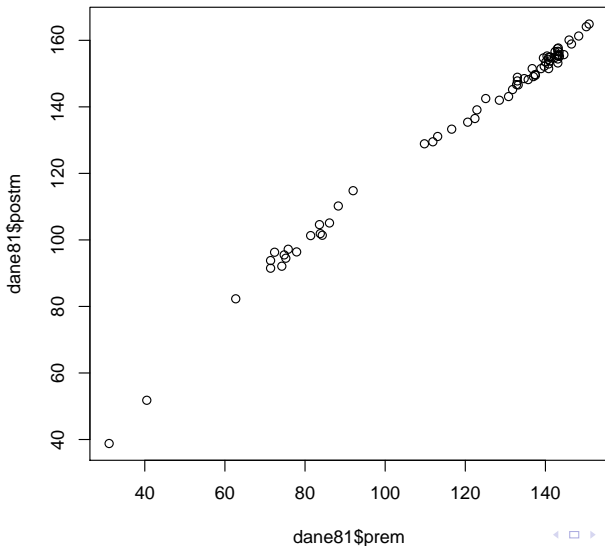
# Zabawa z danymi - dane z 1981 roku

	prem	postm	wiel	rok	polow
112	142.3	154.8	12.5	81	1
113	125.1	142.5	17.4	81	1
114	140.8	154.9	14.1	81	1

# Zabawa z danymi - dane z 1981 roku

prem	postm	wiel
Min. : 31.10	Min. : 38.8	Min. : 7.70
1st Qu.: 91.08	1st Qu.:113.7	1st Qu.:12.50
Median :135.20	Median :148.7	Median :14.05
Mean :119.98	Mean :135.1	Mean :15.12
3rd Qu.:142.32	3rd Qu.:154.9	3rd Qu.:17.68
Max. :150.90	Max. :164.9	Max. :23.90

# Zabawa z danymi - dane z 1981 roku

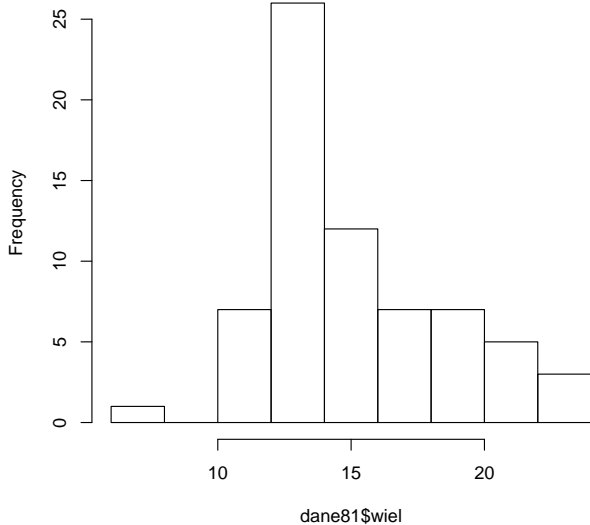


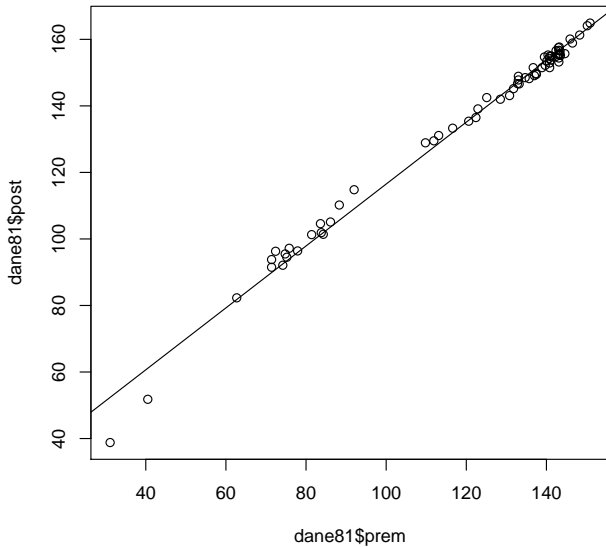
dane81\$prem

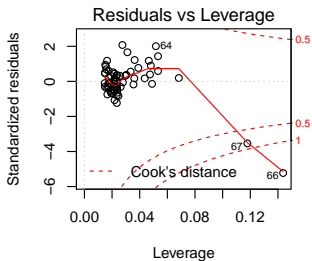
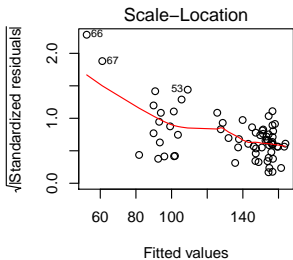
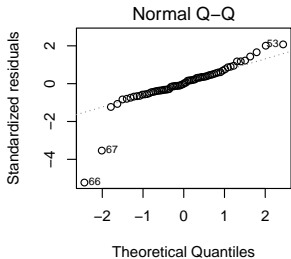
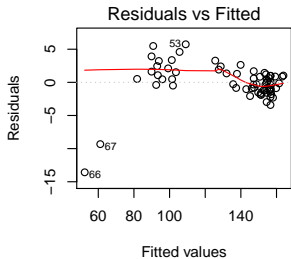
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### Histogram of dane81\$wiel









Call:

```
lm(formula = dane81$post ~ dane81$prem)
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Residuals:

Min	1Q	Median	3Q	Max
-13.5751	-1.0821	0.0031	1.3023	5.7451

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	23.43022	1.40283	16.70	<2e-16 ***
dane81\$prem	0.93070	0.01134	82.05	<2e-16 ***

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.806 on 66 degrees of freedom

Multiple R-squared: 0.9903, Adjusted R-squared: 0.9901

F-statistic: 6732 on 1 and 66 DF, p-value: < 2.2e-16