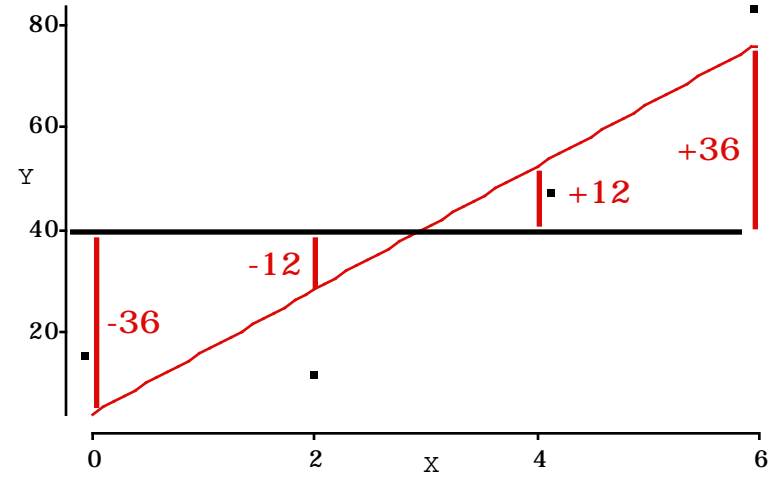
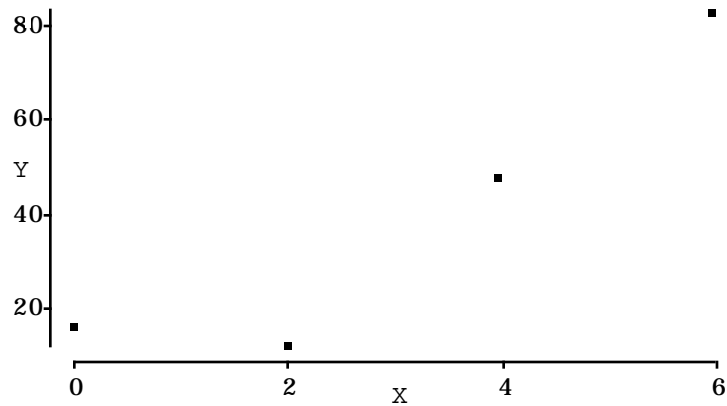
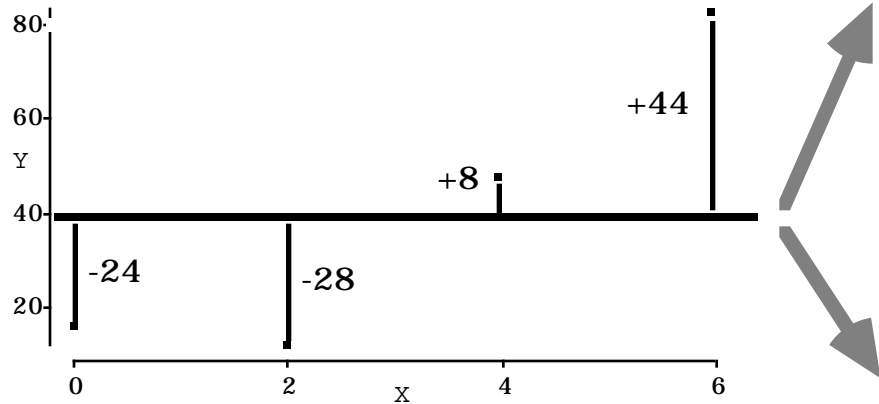


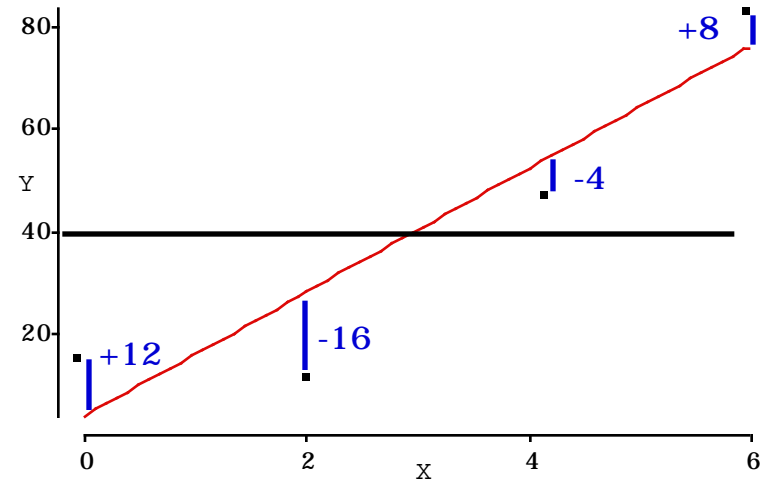
De-composition (Partition) of Total Sum of "Squares" (Squared Deviations from Mean) p 1 / 2



$$(-36)^2 + (-12)^2 + (+12)^2 + (+36)^2 = 2880 \text{ SS}_{\text{regression}}$$



$$(-24)^2 + (-28)^2 + (+8)^2 + (+44)^2 = 3360 \text{ SS}_{\text{tot}}$$



$$(+12)^2 + (-16)^2 + (-4)^2 + (+8)^2 = 480 \text{ SS}_{\text{residual}}$$

De-composition (Partition) of Total Sum of Squares

Parametric Regression Fit								
Curve	Degree(Polynomial)	Model		Error		R-Square	F Stat	Prob > F
		DF	Mean Square	DF	Mean Square			
	1	1	2880.0000	2	240.0000	0.8571	12.0000	0.0742

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Stat	Prob > F
Model	1	2880.0000	2880.0000	12.0000	0.0742
Error	2	480.0000	240.0000		
C Total	3	3360.0000			

$$\frac{2880}{3360} = 0.8571$$

De-composition

Parameter Estimates							
Variable	DF	Estimate	Std Error	T Stat	Prob > T	Tolerance	Var Inflation
INTERCEPT	1	4.0000	12.9615	0.3086	0.7868	.	0
X	1	12.0000	3.4641	3.4641	0.0742	1.0000	1.0000

residuals

