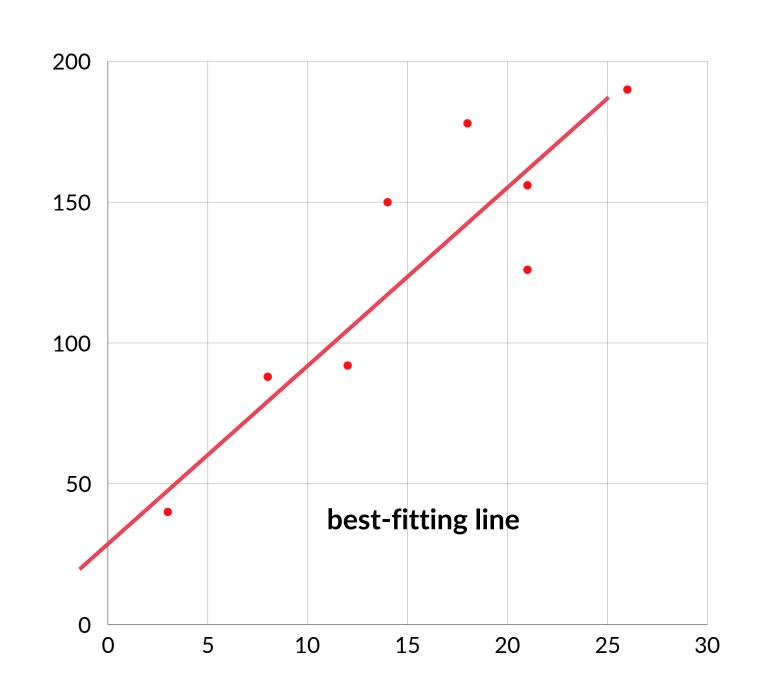
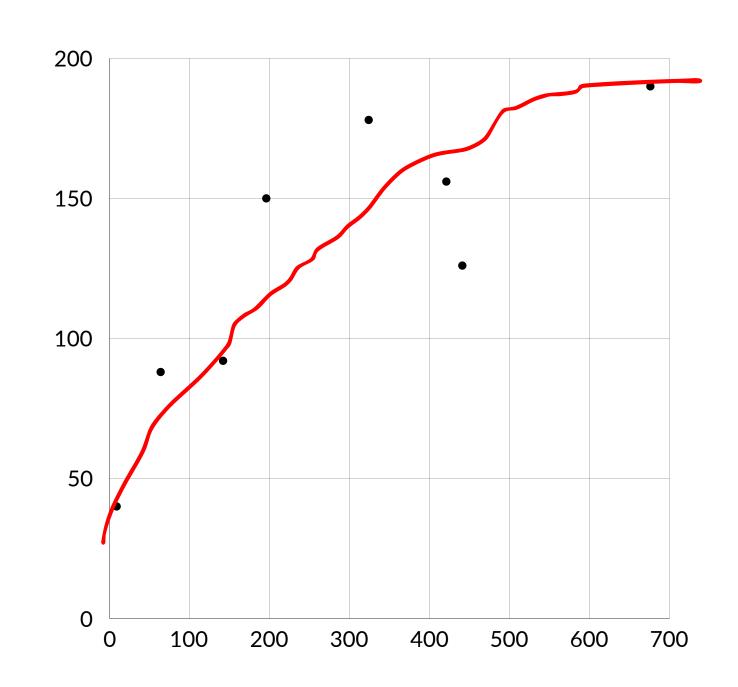
Polynomial Regression

Polynomial Linear Regression







$$y = \beta_0 + \beta_1 x + \beta_2 x^2 + \beta_3 x^3 + \dots + \beta_p x^p + \epsilon$$

Polynomial Linear Regression



Degree 1:
$$y=\beta_0+\beta_1x+\epsilon$$

Degree 2:
$$y=eta_0+eta_1x+eta_2x^2+\epsilon$$

Degree 3:
$$y=eta_0+eta_1x+eta_2x^2+eta_3x^3+\epsilon$$

Degree 4:
$$y=eta_0+eta_1x+eta_2x^2+eta_3x^3+eta_4x^4+\epsilon$$

Degree n:
$$y=eta_0+eta_1x+eta_2x^2+eta_3x^3+\cdots+eta_nx^n+\epsilon$$