Assessing Function Fit with Residuals

Today's Standard

HSS.ID.B6b - Informally assess the fit of a function by plotting and analyzing residuals.

Cues	Notes
What is a residual?	A residual is the difference between the observed value and the value predicted by the function.
How do you assess the fit of a function?	To assess the fit of a function, plot the residuals and analyze their pattern. A good fit will have residuals randomly distributed around zero.
What is a common misconception about residuals?	A common misconception is that a small number of large residuals means a poor fit. The overall pattern is more important.

Summary

Residuals are differences between observed and predicted values. Assessing the fit of a function involves plotting and analyzing residuals. Common misconceptions include misunderstanding the significance of large residuals and the expectation that residuals should always be close to zero.