Seven Sins of Regression Analysis

Problem		Does it create bias?	Does it affect SE's?	Solution
1	Multicollinearity	NO	YES	Depends upon whether the issue is measurement or causal. If it is measurement, omit a variable. If it is causal, you need good research design.
2	Omitted Variable Bias	YES	YES	Research design, Fixed Effects, Instrumental Variables
3	Measurement Error DV	NO	YES	Better measurement
	Measurement Error IV	YES - attenuation	YES	Better measurement
4	Misspecification	YES	YES	Visualize the data, add non-linear terms to the model (X^2, X^3, etc) use log transformations, outlier analysis
	Outliers	Maybe	If bias exists	
5	Heterogeneity	YES	YES	Fixed effects if it is unobservable omitted variables that cause the observed differences in the data (intelligence, natural ability, efficiency in task completion).
6	Selection (non-random into or out of a group)	YES	YES	Control non-random selection through research design (randomization to control and treatment groups). Model the selection process (Heckman Selection Model - not covered here, just know it exists).
	Random attrition	NO	YES	
7	Simultaneity	YES	YES	Panel data, Structural Equation Models (SEM) (not covered here - just know they exist)