Multiphoton absorption is a nonlinear optical phenomenon with a wide range of applications. Despite many decades of studying this effect, the measurement of its order and cross section remains challenging in many instances. I will briefly discuss some of the most widely used methods for characterizing nonlinear absorption. I will then introduce a new class of methods that we have developed called 2-beam action spectroscopies. I will discuss examples of using this strategy to study nonlinear absorption in photoresists, semiconductors, and dye molecules.