Typical contingent claims such as options are written on two or more underlying assets. Each of the underlying assets can be chosen as a numeraire for the purposes of pricing and hedging as long as the price of such asset is positive. This leads to at least two alternative formulations of the pricing problem, depending on the number of available reference assets with a positive price that enter a given contract. We show that the prices when expressed under different numeraires are connected by a functional relationship known as perspective mapping. This technique of computing prices under different reference assets is more general than simply computing the prices as expected discounted payoffs under the martingale measure associated with a given numeraire since it works also in situations when the reference asset does not have a corresponding martingale measure. For instance, an asset that represents the maximum price in the payoff of lookback options does not have a martingale measure, but the price of the contract with respect to the maximum can still be expressed using perspective mapping. This method applies for a general evolution of the price process. We give examples of the relationship of the pricing measures in the binomial model, the diffusion model, and the L\'evy jump model. We give two formulations of the pricing problem for European and American options, and three formulations of the problem for exotic options such as quantos, lookbacks, or Asians. In diffusion models, we obtain partial differential equations that correspond to the pricing problem.