



Bidding Wisely

The basic auction format familiar to most people is just one of the many forms that an auction might take. For example, in the "second-price auction," the highest bidder is awarded the object but charged only the amount of the second-highest bid. (This is not as bad for the seller as it might sound; bidding can be more aggressive in this format.) This and other auction formats are studied using mathematical modeling, game theory, combinatorics, integer programming and optimization. One fundamental conclusion arrived at by researchers is that inexperienced bidders almost always overbid.



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The **Mathematical Moments** program promotes appreciation and understanding of the role mathematics plays in science, nature, technology, and human culture.