

1046-L1-330 **Andrew G Niedermaier*** (aniederm@math.ucsd.edu), 9500 Gilman Drive, La Jolla, CA
92093-0112. *Meet Colonel Blotto.*

Meet Colonel Blotto, master tactician of the battlefield. His problem is a doozy: apportion 100 soldiers to fight at 10 different castles. The opposing also has 100 soldiers, and the larger army at each castle will claim victory. Should Blotto send 10 soldiers to each castle, or perhaps should he focus his efforts on a subset of the 10?

Well, it depends. Are the castles equally valuable? What happens when 100 people play each other pairwise? What happens when two armies face each other multiple times – do they change their strategies from one skirmish to the next?

The enormous potential for variations to the basic rules makes Blotto an excellent entree to the ideas of repeated play, strategic thinking, and apportionment. Blotto makes for a fun classroom diversion inbetween lessons, but it can just as easily serve as the focus of an in-depth discussion of core game theory concepts. I've had success playing Blotto with junior high students, high school students, and college calculus lectures.

I will introduce the basic rules, highlight some interesting variations, and describe how a game of Blotto can be quickly run using an Excel spreadsheet. And of course, I will invite the audience to participate in a friendly all-play-all Blotto game. (Received August 26, 2008)