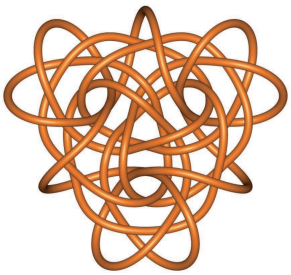
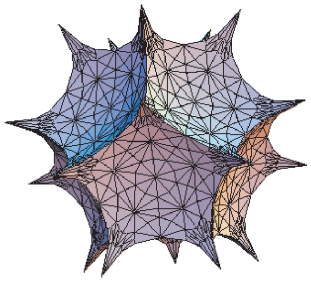
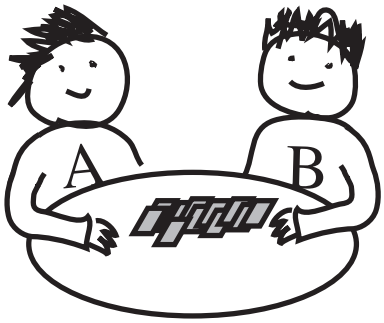


Willamette Math Problem of the Week



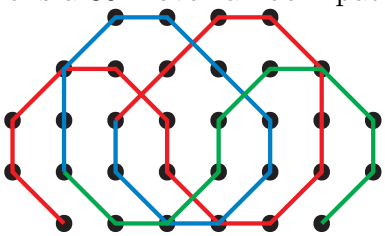
November 26 2007
Deterministic Poker

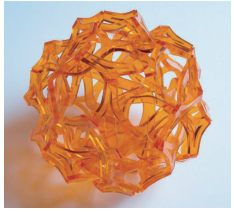


The game of Deterministic Five-Card Draw is played as follows. A deck of cards is spread face-up on a table. Anton chooses five of them. Then Brandi chooses five of the remaining cards from the deck. Then Anton discards any number of his cards and replaces them from the deck, and then Brandi does the same. The player with the best poker hand wins. If the two hands are equally good, Brandi wins. Find a winning strategy for one of the players.

Submit all solutions before the appearance of the next problem to Josh Laison in person, by e-mail (jlaison@willamette.edu), or by message in a bottle. The first correct solution gets a prize; all correct solutions get fame and glory. Preference for the prize goes to problem-solvers who haven't won one yet.

Solution to *An Ice Problem*:
Congratulations to **John Nielsen**, who found a 39-move zamboni path and won a giant clown nose. Here is a 35-move zamboni path, which is the best known length.





Past problems of the week, solutions, and solvers can be found at http://www.willamette.edu/~jlaison/problem.html