Problem of the Month, May/June 2009

Please turn all solutions into Dr. Dunn’s office, JB 322. You may slide your solutions under his door as well. Most elegant solution of this month’s problem wins a $10 gift certificate to the bookstore! Since June is a short month for us here, we’ve combined the months to give you all more time to work on this problem! Solutions will be accepted anytime before the end of Spring term, 2009. Good luck! Stay tuned next year for more Problems of the Month!

Forty five cups are placed upright on a table top. Turning over six at a time (no more, no less) can you flip all the cups upside down? Show that it is possible to invert 40 cups, turning over six at a time.