



PROBLEM OF THE WEEK #8
(Spring 2017)

The NCAA men's basketball tournament features 64 teams* in a 6-round single-elimination tournament. In each round, every team plays one game, and the losing teams are immediately eliminated from the tournament.

This year, I entered a bracket contest: before the tournament started, I submitted predictions of the winners of all the games. Unfortunately, I hadn't been paying much attention to college basketball, so I made all of my predictions by tossing coins.

According to the contest rules, every correct guess in the first round earns me one point; this value doubles every round, so that (for example) guessing the winner of the championship game is worth 32 points. [But it's hard to earn those points, because my predicted winner is likely to lose before the championship game.]

What is the expected value of my total score?

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, March 29, 2017.

Every week, the best solution submitted earns a \$10 Platteville gift certificate; the top scorer each semester also wins a cash award. Good luck!

You can always see the Problem of the Week (and complete rules) online at:

<http://uwpmath.weebly.com/>

*The play-in games don't count.