



UNIVERSITY OF WISCONSIN
PLATTEVILLE
DEPARTMENT OF MATHEMATICS

PROBLEM OF THE WEEK #6
(Spring 2024)

I arrived at the Magic: the Gathering tournament with my deck of 24 land cards and 36 other cards. On average, once I shuffle the deck (but before I start to draw), how many places will there be in the deck where a land card touches a non-land card (*i.e.*, comes immediately before or after it in the deck)?

[Please fully explain your answer.]

Email solutions to kwonmi@uwplatt.edu by 2:00pm on Wednesday, March 6, 2024.

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/>