



PROBLEM OF THE WEEK #4  
(Spring 2020)

Give a trigonometry-free description of the triples  $(A, B, C)$  for which

$$\tan A + \tan B + \tan C = \tan A \tan B \tan C.$$

[Please fully explain your answer.]

Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, March 4, 2020.

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/>