Problem of the Week #3  
9/20/2021 to 10/3/2021

$S$ is a point inside triangle $ABC$ such that the areas of the triangles $ABS$, $BCS$, and $CAS$ are all equal. Prove that $S$ is the centroid of $ABC$.

Solutions to the last problem were submitted by Ziad Aramouni (Lebanon), Phil Boyd (Manchester, England), Rob Hill (Gambrills, MD), Kipp Johnson (Beaverton, OR), Hari Kishan (India), Lukas Klawuhn (Germany), Tengiz Kutchava (Georgia, the country), Tin Lam (St. Louis, MO), Manuel G. Flota López (México), Yann Michel (Paris, France), Luciano Santos (Portugal), François Seguin (Amiens, France), and Zurab Zakaradze (Georgia, the country).

Solutions for this problem can be submitted to Dr. Brian Miceli at bmiceli@trinity.edu. People who submit solutions will be acknowledged on the next problem. If you like these problems, you may be interested in the Putnam Exam, and more information on the Putnam Exam may be found [HERE](#).