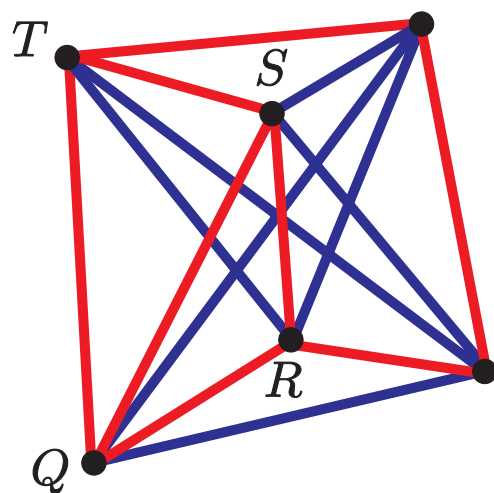


Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

November 6-13



Six points are given in the plane, no three of which are collinear. Each segment XY where X and Y are any two of the six points is drawn using either red or blue ink.

Show that, no matter how these segments are colored, there must be four distinct points Q, R, S and T from among these six such that the segment QR, RS, ST , and TQ are all the same color.

This contest is sponsored by the Mathematics Department. Open to all CSUN students.

Winner gets \$5 or an equivalent prize. All complete and correct solutions get a certificate.

Type and send your solution before November 13th, 9:00PM to silvia.fernandez@csun.edu.

All steps of the solution must be clearly justified.

For rules, winners, solutions, and more information visit: www.csun.edu/math/probweek