

PROBLEM # 659

Posted on: 2 Oct

Due on: 9 Oct

a) Prove that for any five points P, A, B, C , and D in the plane,

$$PA + PB + PC + PD > 0.33(AB + AC + AD + BC + BD + CD).$$

b) Is it possible to find five points P, A, B, C , and D in the plane such that

$$PA + PB + PC + PD < 0.34(AB + AC + AD + BC + BD + CD)?$$

The problem of the week can also be found online here:

