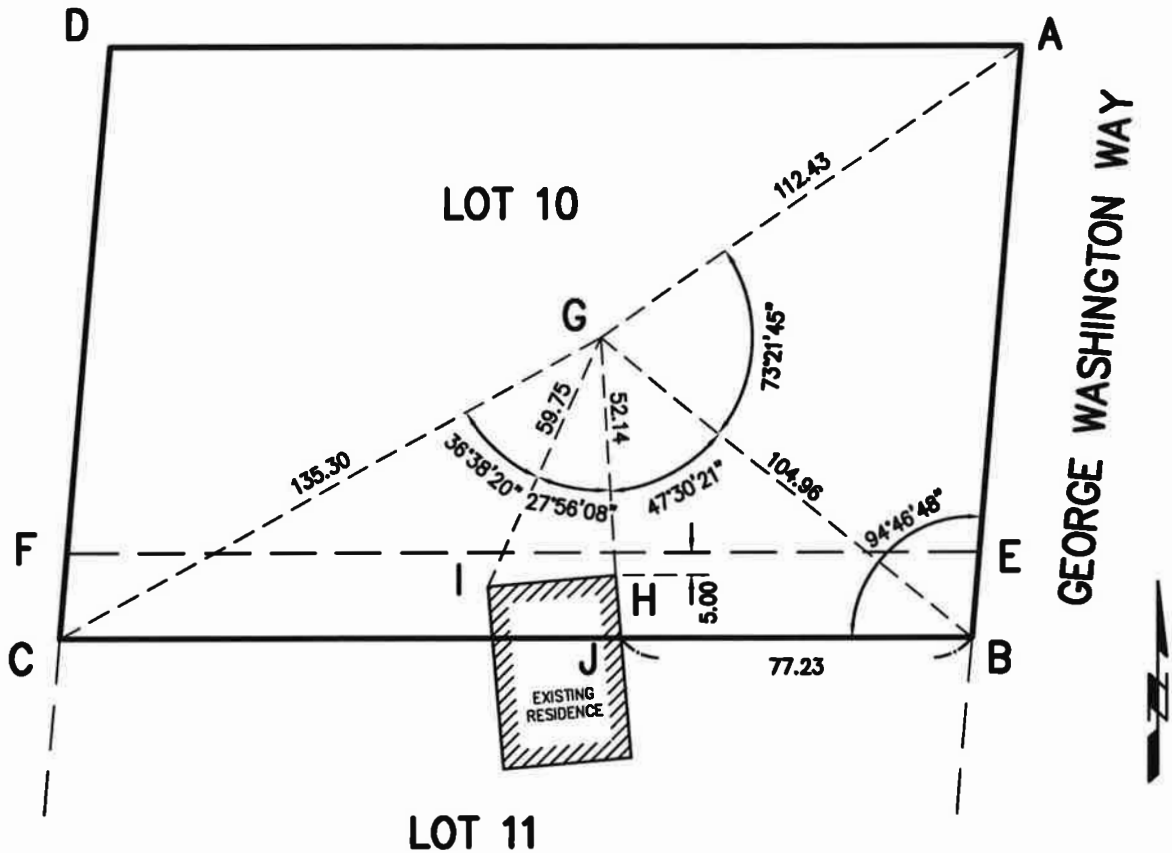


TRIG-STAR PROBLEM LOCAL CONTEST

THE OWNER OF LOT 10 IS PREPARING TO HAVE A HOUSE BUILT ON THE LOT. THE RESULTS OF A LAND SURVEY OF LOT 10 SHOWS THAT A PORTION OF THE EXISTING RESIDENCE THAT WAS BUILT FOR THE OWNER OF LOT 11 IS OVER THE LOT LINE. IT IS NECESSARY THAT A PORTION OF LOT 10 BE SOLD TO THE OWNER OF LOT 11. THE CITY REQUIRES THAT THE NEW LINE IS TO BE 5.00 FEET (BY PERPENDICULAR MEASUREMENT) FROM THE CLOSEST CORNER OF THE EXISTING RESIDENCE, AND THAT THE NEW LINE IS TO BE PARALLEL WITH THE SOUTH LINE OF LOT 10. THE SURVEYOR'S MEASURED ANGLES AND DISTANCES ARE SHOWN BELOW. (NOTE: LINE AD IS PARALLEL TO AND EQUAL IN DISTANCE TO LINE BC.)



DISTANCE GA = 112.43 DISTANCE GB = 104.96 DISTANCE GH = 52.14
 DISTANCE GI = 59.75 DISTANCE GC = 135.30 DISTANCE BJ = 77.23
 ANGLE ABC = 94°46'48" ANGLE BGA = 73°21'45" ANGLE HGB = 47°30'21"
 ANGLE IGH = 27°56'08" ANGLE CGI = 36°38'20"

- DISTANCE AB = 130.00 (6 POINTS)
- DISTANCE BC = 200.00 (6 POINTS)
- DISTANCE HI = 28.00 (6 POINTS)
- DISTANCE BE = 18.83 (6 POINTS)
- AREA BCFE = 3,753 (6 POINTS)

REQUIRED ANSWER FORMAT

DISTANCES: NEAREST HUNDREDTH
 AREA: NEAREST FULL UNIT

PAGE TOTAL: _____ POINTS