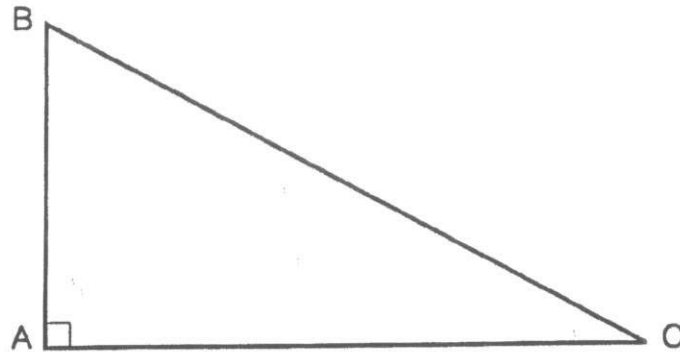


## TRIG-STAR PROBLEM LOCAL CONTEST

PRINT NAME: \_\_\_\_\_



KNOWN: DISTANCE AB = 103.14      DISTANCE BC = 191.75

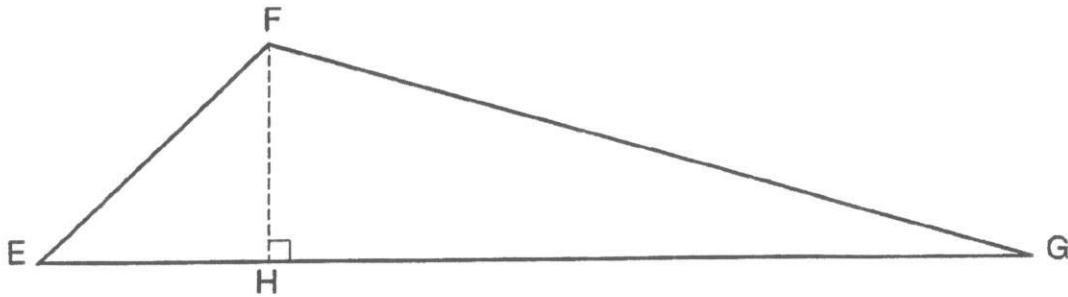
FIND:  $\angle CBA =$  \_\_\_\_\_ (5 POINTS)

DISTANCE AC = \_\_\_\_\_ (5 POINTS)

**REQUIRED ANSWER FORMAT**

DISTANCES: NEAREST HUNDREDTH  
ANGLES: DEGREES-MINUTES-SECONDS  
TO THE NEAREST SECOND

## TRIG-STAR PROBLEM LOCAL CONTEST



KNOWN: DISTANCE EF = 111.67     $\angle EFG = 120^{\circ}13'57''$      $\angle FEG = 42^{\circ}00'18''$

FIND:  $\angle EGF =$  \_\_\_\_\_ (6 POINTS)

DISTANCE EH = \_\_\_\_\_ (6 POINTS)

DISTANCE FH = \_\_\_\_\_ (6 POINTS)

DISTANCE FG = \_\_\_\_\_ (6 POINTS)

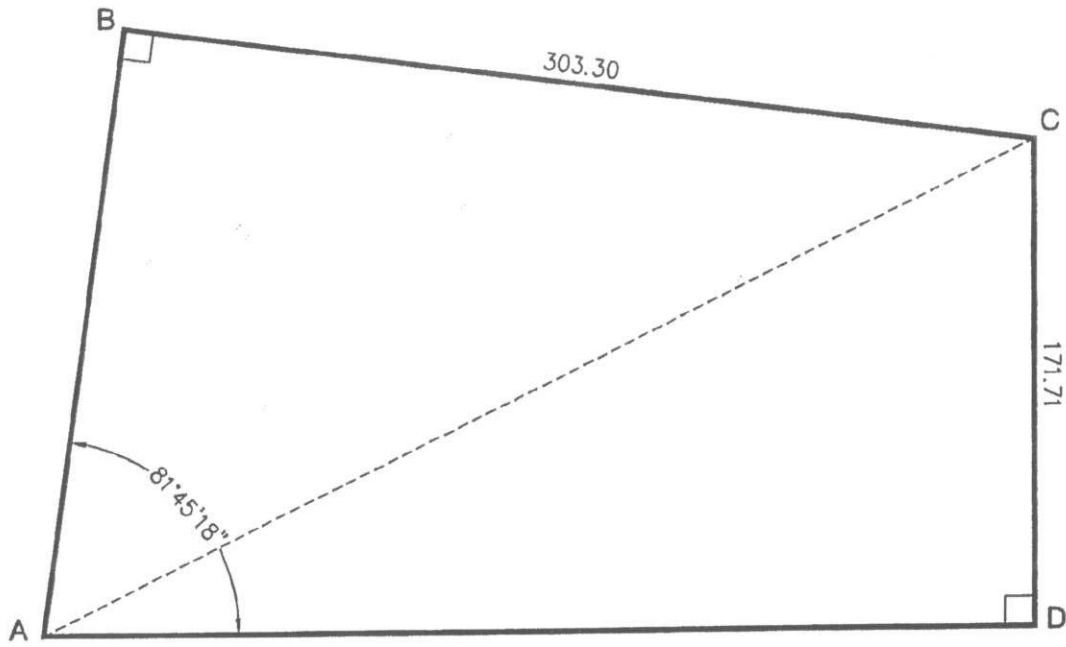
DISTANCE GH = \_\_\_\_\_ (6 POINTS)

**REQUIRED ANSWER FORMAT**

DISTANCES: NEAREST HUNDREDTH  
ANGLES: DEGREES-MINUTES-SECONDS  
TO THE NEAREST SECOND

PAGE TOTAL: \_\_\_\_\_ POINTS

# TRIG-STAR PROBLEM LOCAL CONTEST



KNOWN: DISTANCE BC = 303.30    DISTANCE CD = 171.71  
 $\angle$  BAD = 81°45'18"

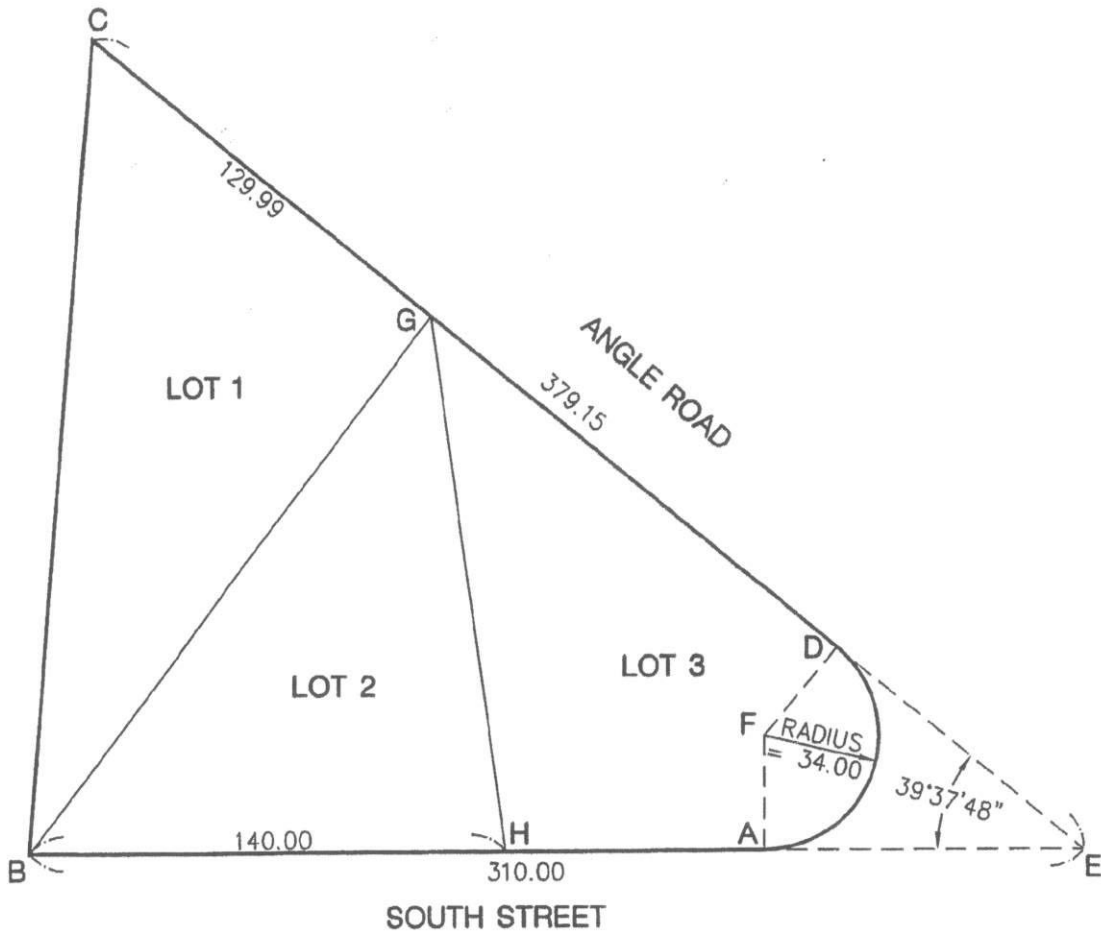
- FIND: DISTANCE AB = \_\_\_\_\_ (10 POINTS)  
DISTANCE AD = \_\_\_\_\_ (10 POINTS)  
DISTANCE AC = \_\_\_\_\_ (10 POINTS)

REQUIRED ANSWER FORMAT  
DISTANCES: NEAREST HUNDREDTH

PAGE TOTAL: \_\_\_\_\_ POINTS

# TRIG-STAR PROBLEM LOCAL CONTEST

A FATHER HAS DIVIDED A TRACT OF LAND AS SHOWN BY FIGURE A, B, C, D, AND ARC DA INTO LOTS FOR HIS THREE CHILDREN. THE TIME HAS COME FOR THE CHILDREN TO DETERMINE WHO GETS WHICH LOT. THEY DECIDE TO DRAW FROM A DECK OF CARDS FOR FIRST AND SECOND CHOICE. THE CHILDREN WOULD LIKE MORE INFORMATION BEFORE THEY MAKE THEIR CHOICES.



FIND:

DISTANCE BC = \_\_\_\_\_ (5 POINTS)

DISTANCE BG = \_\_\_\_\_ (5 POINTS)

DISTANCE GH = \_\_\_\_\_ (5 POINTS)

ARC DISTANCE AD = \_\_\_\_\_ (5 POINTS)

AREA LOT 1 = B,C,G,B = \_\_\_\_\_ (5 POINTS)

AREA LOT 3 = A,H,G,D, ARC DA = \_\_\_\_\_ (5 POINTS)

**REQUIRED ANSWER FORMAT**

DISTANCES: NEAREST HUNDREDTH  
 AREA: NEAREST WHOLE UNIT

PAGE TOTAL: \_\_\_\_\_ POINTS