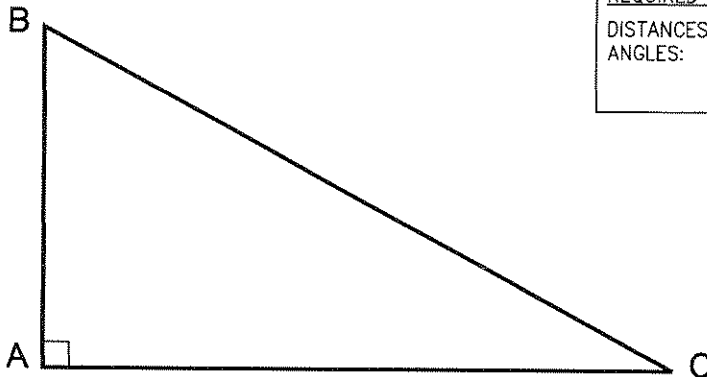


TRIG STAR PACKET #1

TRIG-STAR PROBLEM 1-A LOCAL CONTEST

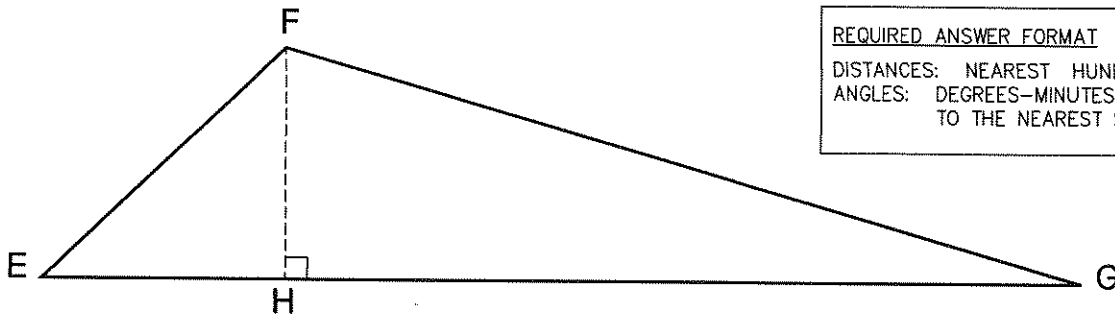
Calculator: degree mode
 Evidence of work must be shown
 for credit



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

KNOWN: DISTANCE AB = 39.39 DISTANCE BC = 82.56
 FIND: DISTANCE AC = _____ (5 POINTS)
 \angle CBA = _____ (5 POINTS)

TRIG-STAR PROBLEM 1-B LOCAL CONTEST

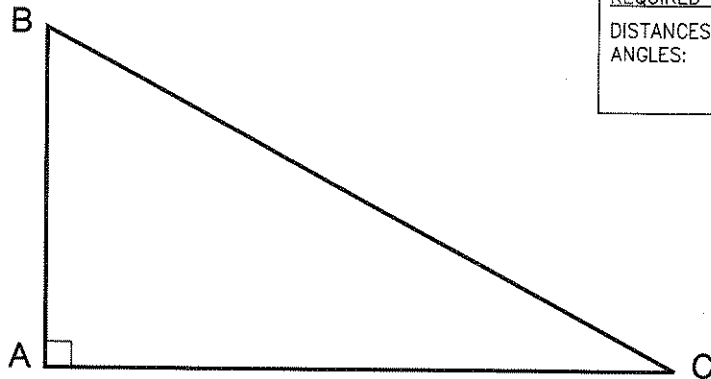


REQUIRED ANSWER FORMAT
 DISTANCES: NEAREST HUNDREDTH
 ANGLES: DEGREES-MINUTES-SECONDS
 TO THE NEAREST SECOND

KNOWN: DISTANCE EF = 46.15 \angle GFE = 120°20'18" \angle FEG = 43°34'24"
 FIND: DISTANCE EH = _____ (6 POINTS)
 DISTANCE FH = _____ (6 POINTS)
 DISTANCE FG = _____ (6 POINTS)
 DISTANCE GH = _____ (6 POINTS)
 \angle EGF = _____ (6 POINTS)

PAGE TOTAL: _____ POINTS

TRIG-STAR PROBLEM LOCAL CONTEST



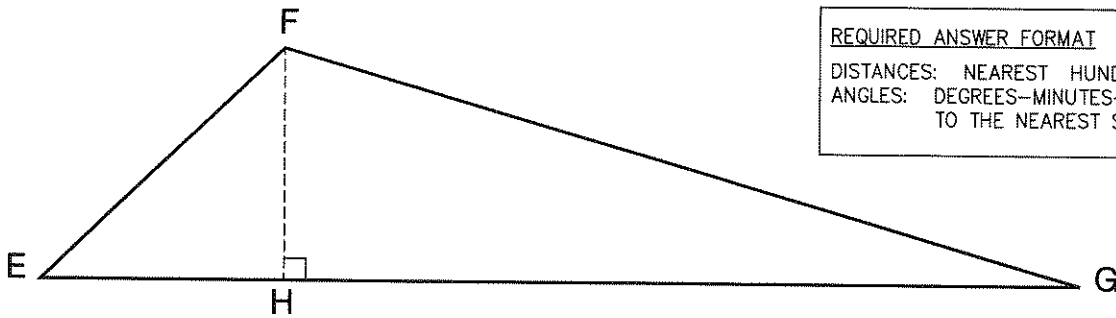
REQUIRED ANSWER FORMAT
 DISTANCES: NEAREST HUNDREDTH
 ANGLES: DEGREES-MINUTES-SECONDS
 TO THE NEAREST SECOND

KNOWN: DISTANCE AB = 56.15 DISTANCE BC = 116.25

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

DISTANCE AC = _____ (5 POINTS)

TRIG-STAR PROBLEM LOCAL CONTEST



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

KNOWN: DISTANCE FG = 133.95 $\angle GFE = 119^{\circ}29'56''$ $\angle FGE = 16^{\circ}14'55''$

FIND: $\angle FEG =$ _____ (6 POINTS)

DISTANCE FH = _____ (6 POINTS)

DISTANCE EF = _____ (6 POINTS)

DISTANCE GH = _____ (6 POINTS)

DISTANCE EH = _____ (6 POINTS)

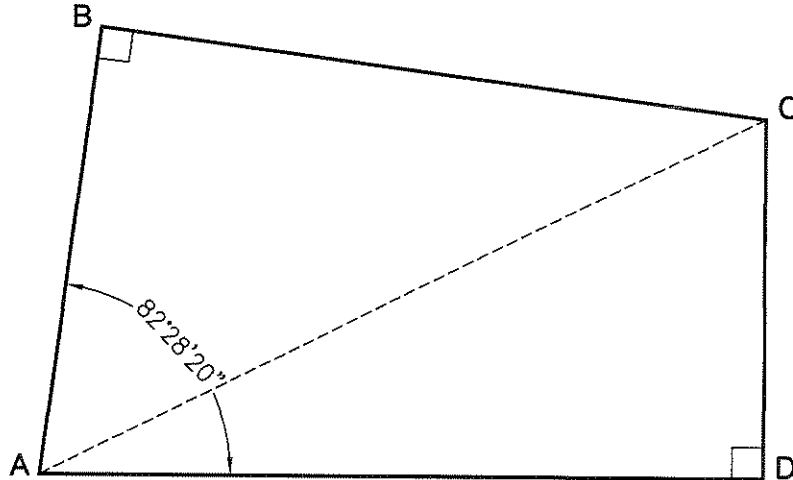
PAGE TOTAL: _____ POINTS

TRIG-STAR PROBLEM 2 LOCAL CONTEST

Hint: Draw in \overline{BD}

REQUIRED ANSWER FORMAT

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



KNOWN: DISTANCE $BC = 128.82$ DISTANCE $CD = 68.86$
 $\angle BAD = 82^{\circ}28'20''$

FIND: DISTANCE $AB =$ _____ (10 POINTS)
DISTANCE $AD =$ _____ (10 POINTS)
DISTANCE $AC =$ _____ (10 POINTS)

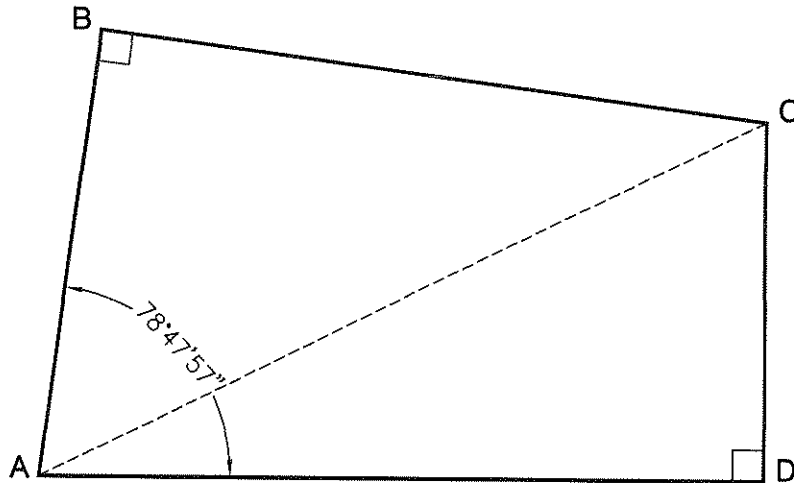
PAGE TOTAL: _____ POINTS

TRIG-STAR PROBLEM LOCAL CONTEST

Same hint!

REQUIRED ANSWER FORMAT

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



KNOWN: DISTANCE $BC = 95.73$ DISTANCE $CD = 50.15$
 $\angle BAD = 78^{\circ}47'57''$

FIND: DISTANCE $AB =$ _____ (10 POINTS)

DISTANCE $AD =$ _____ (10 POINTS)

DISTANCE $AC =$ _____ (10 POINTS)

PAGE TOTAL: _____ POINTS

TRIG-STAR ANSWER KEY LOCAL CONTEST

PAGE 1

$$\sphericalangle CBA = \boxed{61^{\circ}07'04''}$$

$$\text{DISTANCE AC} = \boxed{101.79}$$

PAGE 1

$$\sphericalangle FEG = \boxed{44^{\circ}15'09''}$$

$$\text{DISTANCE FH} = \boxed{37.48}$$

$$\text{DISTANCE EF} = \boxed{53.71}$$

$$\text{DISTANCE GH} = \boxed{128.60}$$

$$\text{DISTANCE EH} = \boxed{38.47}$$

PAGE 2

$$\text{DISTANCE AB} = \boxed{70.08}$$

$$\text{DISTANCE AD} = \boxed{107.52}$$

$$\text{DISTANCE AC} = \boxed{118.64}$$

PAGE 3

$$\text{DISTANCE AE} = \boxed{128.88}$$

$$\text{ARC DISTANCE E-F} = \boxed{65.02}$$

$$\text{AREA AEFG} = \boxed{2836}$$

TRIG-STAR PROBLEM 1-A LOCAL CONTEST

PAGE 1, PROBLEM 1-A

$$\text{DISTANCE AC} = \boxed{72.56}$$

$$\sphericalangle \text{CBA} = \boxed{61^{\circ}30'12''}$$

PAGE 1, PROBLEM 1-B

$$\text{DISTANCE EH} = \boxed{33.44}$$

$$\text{DISTANCE FH} = \boxed{31.81}$$

$$\text{DISTANCE FG} = \boxed{114.79}$$

$$\text{DISTANCE GH} = \boxed{110.29}$$

$$\sphericalangle \text{EGF} = \boxed{16^{\circ}05'18''}$$

PAGE 2

$$\text{DISTANCE AB} = \boxed{86.48}$$

$$\text{DISTANCE AD} = \boxed{139.04}$$

$$\text{DISTANCE AC} = \boxed{155.16}$$

PAGE 3

$$\text{DISTANCE AB} = \boxed{410.76}$$

$$\text{DISTANCE BC} = \boxed{448.41}$$

$$\text{DISTANCE BD} = \boxed{401.98}$$