Key

For the right triangle "ABC" determine the needed values using the given values:

1) A = **61-09-50**   a = **567.59'**
   B = 28-50-10   b = 312.50'
   C = 90-00-00   c = **647.93'**

2) A = **58-47-50**   a = **6.20'**
   B = 31-12-10   b = **3.76'**
   C = 90-00-00   c = 7.25'

3) A = 54-00-55   a = **566.97'**
   B = **35-59-05**   b = 411.70'
   C = 90-00-00   c = **700.68'**

4) A = **52-44-45**   a = 165.14'
   B = 37-15-15   b = **125.59'**
   C = 90-00-00   c = **207.47'**

5) A = **45-23-00**   a = **821.22'**
   B = 44-37-00   b = 810.30'
   C = 90-00-00   c = **1153.68'**

6) A = **33-26-09**   a = **360.91'**
   B = **56-33-51**   b = 546.60'
   C = 90-00-00   c = 655.00'

7) A = **59-44-59**   a = 87.45'
   B = **30-15-01**   b = 51.00'
   C = 90-00-00   c = **101.23'**

8) A = 59-17-43   a = **NOT**
   B = 30-42-17   b = **POSSIBLE !**
   C = 90-00-00   c = **need a side!**

9) A = **56-26-34**   a = 1000.00'
   B = **33-33-26**   b = **663.32'**
   C = 90-00-00   c = 1200.00'

10) A = **44-59-59** **   a = **465.13'**
    B = **45-00-01** **   b = 465.13'
    C = 90-00-00   c = 657.79'

*** 45-00-00 each**
(based on sides "a" and "b")

RIGHT TRIANGLE TRIGONOMETRY

Key

For extra credit, fill in the blanks:
  (1 pt. for each, 20 pts. for all)

500.00'

36°52'12"

47°

28°45'19"
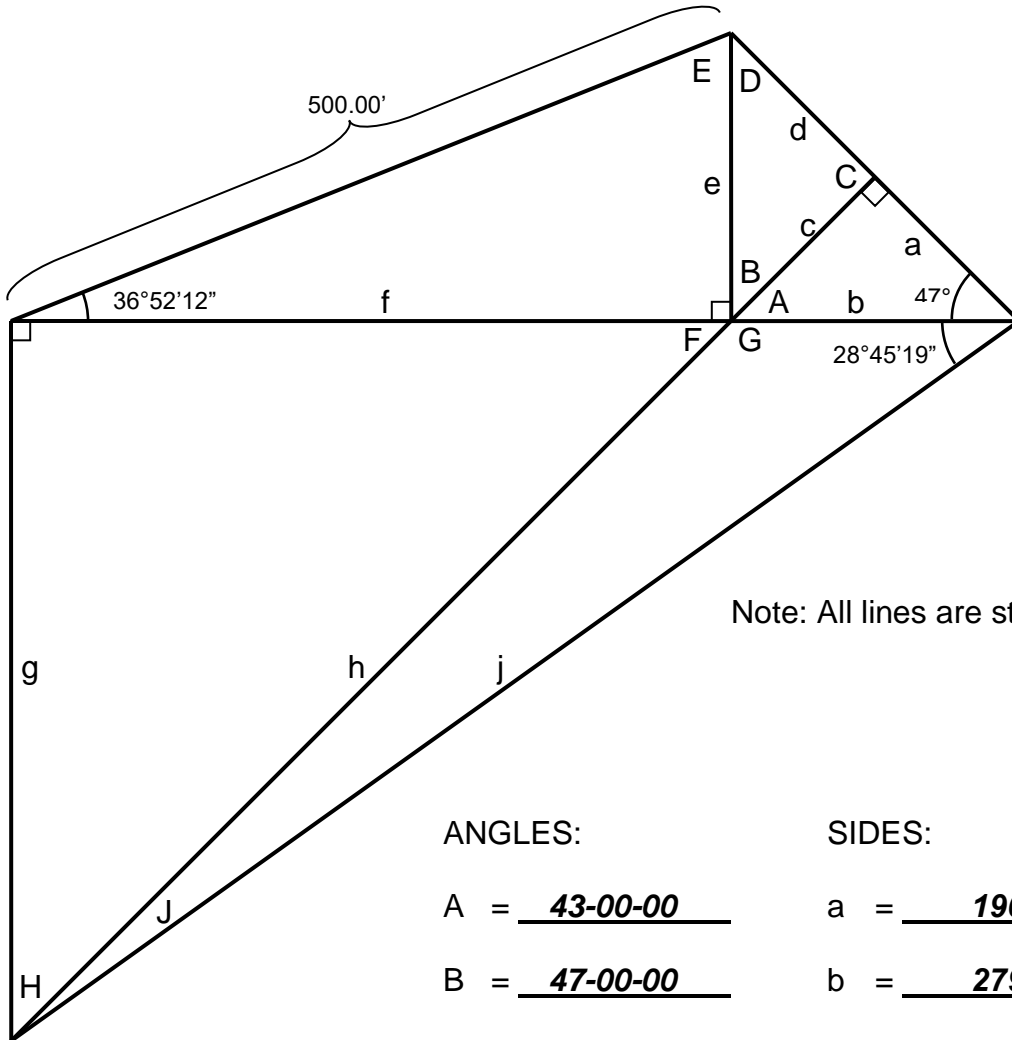
Note: All lines are straight.

ANGLES:

A = *43-00-00*

B = *47-00-00*

C = *90-00-00*

D = *43-00-00*

E = *53-07-48*

F = *43-00-00*

G = *137-00-00*

H = *47-00-00*

J = *14-14-41*

SIDES:

a = *190.79'*

b = *279.76'*

c = *204.60'*

d = *219.41'*

e = *300.00'*

f = *400.00'*

g = *373.01'*

h = *546.93'*

j = *775.37'*