

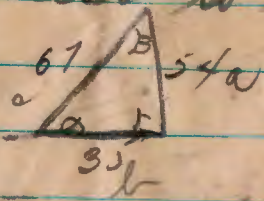
Toole, T

July 24, 1935

10

# Tigonometry Pg 140 # 4

A ladder 67 ft. long is set 35 ft. in front of an inclined buttress and reaches 54 ft. up its face. Find the inclination of the face of the buttress to the horizontal.



$$c^2 = a^2 + b^2 - 2ab \cos r$$

$$67^2 = 54^2 + 35^2 - 2(54 \cdot 35) \cos r$$

$$67^2 = (2916 + 1225) - 2(1890) \cos r$$

$$67^2 = (4141) - (3780) \cos r$$

$$4489 = 4141 - 3780 \cos r$$

$$3780 \cos r = 4141 - 4489$$

$$3780 \cos r = -348$$

$$\cos r = 840 \quad 44' 9''$$

(logged here) 12.54158 - 10

3.57749 -

8.96409 - 10

84	43	896417
84	44	896409
44		896250

129  
37