

$$13.8489 = \log^{-1} 1.14142$$

$$10.0208 = \log^{-1} 1.00090$$

$$9.6770 = \log^{-1} .98574$$

$$3.7605 = \log^{-1} .57524$$

$$a \quad 13.8489 \tan 12^{\circ}30' = \log^{-1}(1.14142 + 9.34576 - 10) = 3.0703'$$

$$b \quad 13.8489 \tan 7^{\circ}30' = \log^{-1}(1.14142 + 9.11943 - 10) = 1.8233'$$

$$c \quad 13.8489 \tan 2^{\circ}30' = \log^{-1}(1.14142 + 8.64009 - 10) = .6046'$$

$$d \quad 3.7605 \tan 27^{\circ}30' = \log^{-1}(.57524 + 9.71648 - 10) = 1.9576'$$

$$e \quad 3.7605 \tan 7^{\circ}30' = \log^{-1}(.57524 + 9.11943 - 10) = .4951'$$

$$f \quad 3.7605 \tan 12^{\circ}30' = \log^{-1}(.57524 + 9.34576 - 10) = .8337'$$

$$g \quad 3.7605 \tan 32^{\circ}30' = \log^{-1}(.57524 + 9.80419 - 10) = 2.3962'$$

$$h \quad 3.7605 \tan 37^{\circ}30' = \log^{-1}(.57524 + 9.82498 - 10) = 2.8855'$$

$$i \quad 3.7605 \tan 17^{\circ}30' = \log^{-1}(.57524 + 9.49872 - 10) = 1.1857'$$

$$j \quad 3.7605 \tan 2^{\circ}30' = \log^{-1}(.57524 + 8.64009 - 10) = .1642'$$

$$k \quad 3.7605 \tan 22^{\circ}30' = \log^{-1}(.57524 + 9.61722 - 10) = 1.5576'$$

$$l \quad 3.7605 \tan 42^{\circ}30' = \log^{-1}(.57524 + 9.96205 - 10) = 3.4458'$$

$$m \quad 10.0208 \tan 17^{\circ}30' = \log^{-1}(1.00090 + 9.49872 - 10) = 3.1595'$$

$$n \quad 10.0208 \tan 12^{\circ}30' = \log^{-1}(1.00090 + 9.34576 - 10) = 2.2216'$$

$$o \quad 10.0208 \tan 7^{\circ}30' = \log^{-1}(1.00090 + 9.11943 - 10) = 1.3192'$$

$$p \quad 10.0208 \tan 2^{\circ}30' = \log^{-1}(1.00090 + 8.64009 - 10) = .4375'$$

$$q \quad 9.6770 \tan 22^{\circ}30' = \log^{-1}(.98574 + 9.61722 - 10) = 4.0083'$$

$$r \quad 9.6770 \tan 17^{\circ}30' = \log^{-1}(.98574 + 9.49872 - 10) = 3.0511'$$

$$s \quad 9.6770 \tan 12^{\circ}30' = \log^{-1}(.98574 + 9.34576 - 10) = 2.1454'$$

$$t \quad 9.6770 \tan 7^{\circ}30' = \log^{-1}(.98574 + 9.11943 - 10) = 1.2740'$$

$$u \quad 9.6770 \tan 2^{\circ}30' = \log^{-1}(.98574 + 8.64009 - 10) = .4225'$$