


⑧

$a=2$ | $\alpha = 28^{\circ}58'7''$  $\beta = 46^{\circ}33'5''$
 $b=3$ | $\gamma = 104^{\circ}68'88''$
 $c=4$

$$a^2 = b^2 + c^2 - 2bc \cos \alpha$$

$$4 = (9) + (16) - 2(3 \cdot 4) \cdot \cos \alpha$$

$$4 - 25 = 24 \cdot \cos \alpha$$

$$\cos \alpha = \frac{21}{24}$$

$$\log \cos \alpha = \log 21 = 11.32222 - 10$$

$$- \log 24 = 1.38021$$

$$9.94201 - 10$$

$2857 \overline{) 994203}$
 $28587 \overline{) 994201}$
 $2858 \overline{) 994196}$

$\frac{5}{7}$

$$\alpha = 28^{\circ}58'7''$$

$$\frac{\sin B}{3} = \frac{\sin 28^{\circ}58'7''}{2}$$

$$\log \sin B = \log 3 + \log \sin 28^{\circ}58'7'' - \log 2$$

$$\log 3 = .47712$$

$$\log \sin 28^{\circ}58'7'' = 9.68489 - 10$$

$$\log \sin = 10.16201 - 10$$

$$\log 2 = .30103$$

$$\log \text{diff} = 9.86098 - 10$$

$$\text{Antilog} = 46^{\circ}33'5''$$

46335
 28587

 $74912''$

5940
 1895860

 753112

 1042848

$$104^{\circ}28'48''$$

$4634 \overline{) 86104}$
 $46 \overline{) 86098}$
 $4637 \overline{) 86092}$

 $\frac{6}{12}$