

37 Note that $\gamma = 180^\circ - 31^\circ - 54^\circ = 95^\circ$. Then $\frac{b}{\sin \beta} = \frac{a}{\sin \alpha} \Rightarrow b = \frac{a \sin \beta}{\sin \alpha} = \frac{2.6 \sin 31^\circ}{\sin 54^\circ} \approx 1.65522$.

$$\text{Area} = K \approx \frac{1}{2} (1.65522)(2.6) \sin 95^\circ \approx 2.14$$