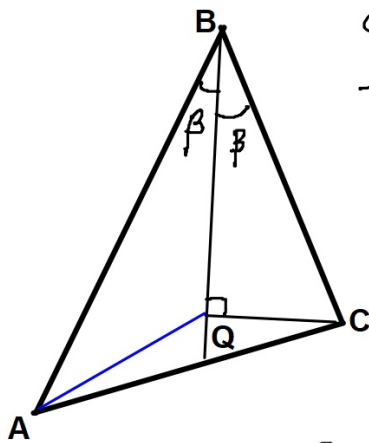




Доказательство: $S_{\triangle ABC} : S_{\triangle ABQ} = 2$

$$S_{\triangle ABC} = 0.5 \cdot AB \cdot BC \cdot \sin 2\beta = 0.5 AB \cdot BC \cdot 2\sin\beta \cos\beta$$

$$S_{\triangle ABQ} = 0.5 \cdot AB \cdot BQ \cdot \sin\beta$$

$$\text{Из } \triangle BQC \Rightarrow BQ = BC \cdot \cos\beta$$

$$\Rightarrow S_{\triangle ABQ} = 0.5 \cdot AB \cdot BC \cdot \cos\beta \cdot \sin\beta$$

$$\Rightarrow \frac{S_{\triangle ABC}}{S_{\triangle ABQ}} = \frac{0.5 \cdot AB \cdot BC \cdot 2\sin\beta \cos\beta}{0.5 \cdot AB \cdot BC \cdot \sin\beta \cos\beta} = 2$$