



Math for the people, by the people.

tangents law

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Let  $ABC$  be a triangle with  $a, b$  and  $c$  being the sides opposite to  $A, B$  and  $C$  respectively. Then the following relation holds.

$$\frac{a-b}{a+b} = \frac{\tan(\frac{A-B}{2})}{\tan(\frac{A+B}{2})}.$$