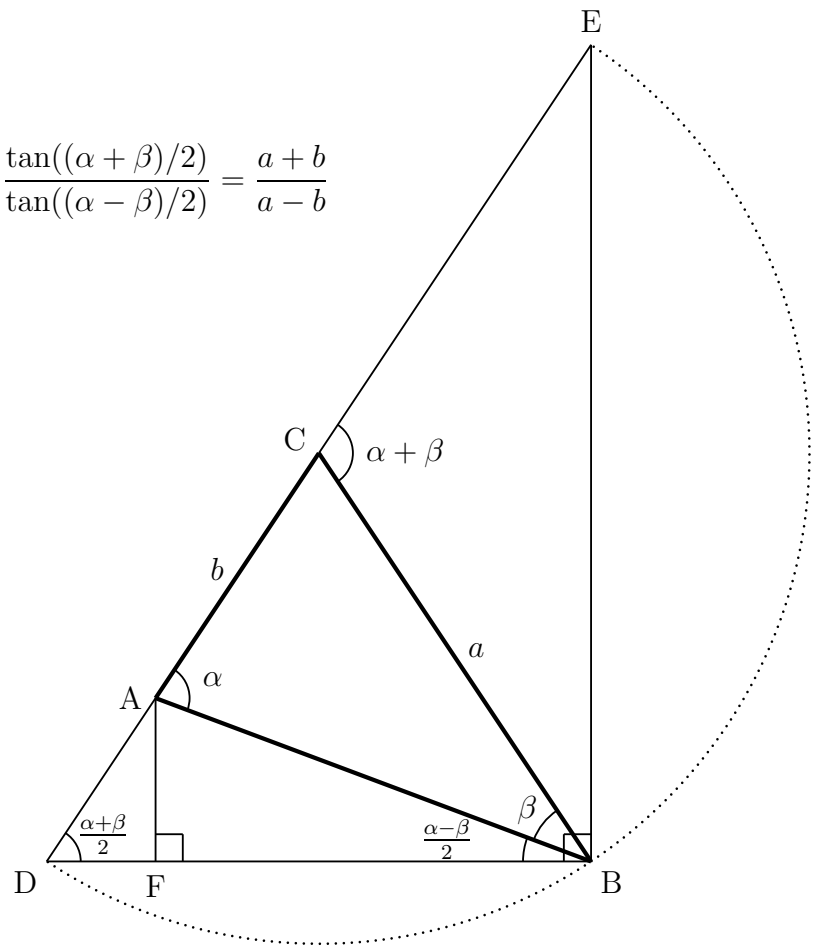
Proof Without Words: The Law of Tangents

$$\frac{\tan((\alpha+\beta)/2)}{\tan((\alpha-\beta)/2)} = \frac{a+b}{a-b}$$



$$CD = CB = CE, \alpha > \beta, \frac{DE}{DB} = \frac{DA}{DF} = \frac{AE}{FB}.$$

$$\frac{\tan((\alpha+\beta)/2)}{\tan((\alpha-\beta)/2)} = \frac{AF/DF}{AF/BF} = \frac{a+b}{a-b}$$

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