

Simple, but a bit hard, Trigonometry problem.

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I've managed to solve it but only after a massive number of calculations.

Is there any other simpler solution? There must be!

If:

$$a = \sin(5^\circ)$$

$$b = \sin(49^\circ)$$

$$c = \sin(87^\circ)$$

then prove that: $\sin(73^\circ) = (a^2 - b^2 + a c) / (4 a (a^2 - b^2 + a c) - (a-b+c))$

If the symbol of degree inside the Sin() does not appear in some browsers then the problem is the follow:

If:

$$a = \sin(5 \text{ degrees})$$

$$b = \sin(49 \text{ degrees})$$

$$c = \sin(87 \text{ degrees})$$

then prove that: $\sin(73 \text{ degrees}) = (a^2 - b^2 + a c) / (4 a (a^2 - b^2 + a c) - (a-b+c))$

Thanks for any help.....

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