

Unappreciated Results Competition

Once, back when I was in school, one of the exercises in my maths textbook was to derive the following result - the tangents of the three angles of a triangle are always such that their product equals their sum:

$$P + Q + R = 180^\circ$$

$$P + Q = 180^\circ - R$$

$$\tan(P + Q) = \tan(180^\circ - R)$$

$$\frac{\tan(P) + \tan(Q)}{1 - \tan(P).\tan(Q)} = -\tan(R)$$

$$\tan(P) + \tan(Q) = -\tan(R) + \tan(P).\tan(Q).\tan(R)$$

$$\underline{\tan(P) + \tan(Q) + \tan(R) = \tan(P).\tan(Q).\tan(R)} \quad \text{QED}$$

This result has always stuck with me as being beautiful and elegant, but unappreciated by the mathematical world.

What's your favourite useless-but-beautiful mathematical result that doesn't receive enough appreciation?

I will draw a picture of the winning entry and post it on my Twitter so that it can be appreciated just a little bit more :)

(Please provide your Twitter handle if you want me to include it)