

Proof of the Pythagorean Theorem

Using President Garfield's Method

See also math.kennesaw.edu/~sellerme/sfehtml/classes/math1112/garfieldpro.pdf

Atrapezoid = Atriangle + Atriangle + Atriangle

$$\frac{1}{2} * h * (b_1 + b_2) = 3 * \frac{1}{2} * \text{base} * \text{height}$$

$$\frac{1}{2} (A + B) * (A + B) = \frac{1}{2} C^2 + \frac{1}{2} A * B + \frac{1}{2} B * A$$

$$(A+B)(A+B) = C^2 + 2AB$$

$$A^2 + 2AB + B^2 = C^2 + 2AB$$

$$A^2 + B^2 = C^2$$

Which was what we wanted

W^5

