∝ Euclid Automated Prover

// Lemma Substitutions //

$a^2 + 2ab + b^2 \Leftarrow (a + b)^2$ (0000)

$(a + b)^2 - 2ab = c^2 \Leftarrow (a + b)^2 = c^2 + 2ab$ (0001)

$a^2 + 2ab - 2ab + b^2 \Rightarrow a^2 + b^2$ (0002)

// Axioms (Syntax & Semantics assumed valid) //

$(a + b)^2 = c^2 + 2ab$ (0003)

Prove : $a^2 + b^2 = c^2$ (0004)

View Source | View Symbols

$a^2 + b^2 = c^2$ (0005)

$a^2 + 2ab - 2ab + b^2 = c^2$ (0006)

$(a + b)^2 - 2ab = c^2$ (0007)

$(a + b)^2 = c^2 + 2ab$ (0008)

$c^2 + 2ab = c^2 + 2ab$ (0009)

Q . E . D . (via Auto) (0010)
