

$$1^2+2^2+2^2 = 9 = 3^2$$

$$2^2+3^2+6^2 = 49 = 7^2$$

$$3^2+4^2+12^2 = 169 = 13^2$$

$$n^2 + (n+1)^2 + [n(n+1)]^2 = [n(n+1)+1]^2$$

Realmente.

$$n^2 + n^2 + 2n + 1 + n^2(n+1)^2 = n^2(n+1)^2 + 2n(n+1) + 1$$

$$2n^2 + 2n + 1 = 2n^2 + 2n + 1$$