

$$\sum_{i=1}^k (4k-1) + 455$$

$$\downarrow 3 + 4k = 2k^2 + 3k + 3$$

$$(2k+3)(k+1)$$

$$2k^2 + 1(3+4k)$$

$$C(k+1)C$$

$$3+4k = k(2k+1)$$

So proven induction!

Attendance quiz 9/22

Look up a joke based on pythagorean theorem
 so 3, 4, 5 and sell down a flight
 of stairs

Now they're a pythagorean cripple.

Complete proof

$$(m^2 - n^2)^2 + 4m^2n^2 = (m^2 + n^2)^2$$

$$\cancel{2m^4} + \cancel{2n^4} + m^2n^2$$

$$\cancel{m^4} + \cancel{n^4} + \cancel{4m^2n^2} - \cancel{4m^2n^2} - \cancel{m^4} - \cancel{n^4} = 0$$

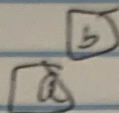
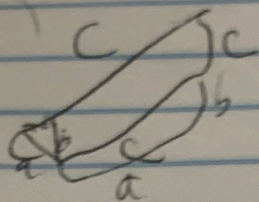
So true

$$a^3 + b^3 = c^3$$

|||

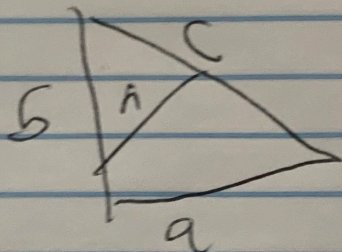
$$a^n + b^n = c^n$$

|||



$$\text{so } \boxed{a} + \boxed{b} = c$$

②



so a, b, c are so

the n, c by

② 3, 4, 5

9, 12, 13 | 15, 8, 17