

$$1 = 1^2$$

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

$$6 = 1^2 + 2^2 + 1^2$$

$$20 = 1^2 + 3^2 + 3^2 + 1^2$$

$$70 = 1^2 + 4^2 + 6^2 + 4^2 + 1^2$$

...