Proof Without Words: Perfect Squares

Md. Shouvik Iqbal

Theorem. Let $n, m \in \mathbb{N}$, where $n \geq m$, then n^2 can be expressed as,

$$n^2 = 4m^2 \qquad\qquad \text{if } n \text{ is even}$$
$$n^2 = 4m^2 + 4m + 1 \qquad\qquad \text{if } n \text{ is odd}$$

Proof.

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