

$$\mathbb{S}_{\text{MU}}^\wedge$$

Imagine maps:

$$\text{Map}_*^G(A, B)$$

where $A, B \in \text{Top}_*^G$.

If $X \in \text{Top}_*$ and $Y \in \text{Top}$, we can form the spectra:

$$\Sigma^\infty X, \Sigma_+^\infty Y$$

Theorem 1 (Pythagoras). $a^2 + b^2 = c^2$.

Proof. Trivial □

Lemma 2 (Zorn's Lemma). *An poset $P \in \text{Poset}$ where all chains are bounded above has a maximal element.*

Proof. Axiom of choice. □

Proposition 3. $\sqrt[3]{2}$ is not a rational number.

Proof. Suppose it was. Then, there will be two integers $a, b \in \mathbb{Z}$ such that $a^3 + a^3 = b^3$. We will need the following:

Theorem 4 (Fermat's Last Theorem, due to Andrew Wiles). *The equation $a^n + b^n = c^n$ has no integer solutions when $n \geq 3$.*

Proof. Trivial [Theorem 4] □

We see that $\sqrt[3]{2}$ being rational produces a contradiction to Fermat's Last Theorem. Therefore, it must be irrational. [Proposition 3] □

Remark 5 (Jordan curve theorem). It happens

Proof. Duh □

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