$$\mathcal{S}^{\wedge}_{\mathcal{mu}}$$

Imagine maps:

$$\mathrm{Map}^G_*(A, B)$$

where $A, B \in \mathsf{Top}^G_*$.

If $X \in \mathsf{Top}_*$ and $Y \in \mathsf{Top}$, 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 $P \in$ 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 □

◁

$$\mathcal{S}, \mathcal{MU}, \mathcal{tmf}, \mathcal{BP}, \mathcal{T}(n), \mathcal{K}(n), \mathcal{H}\mathbb{Z}$$