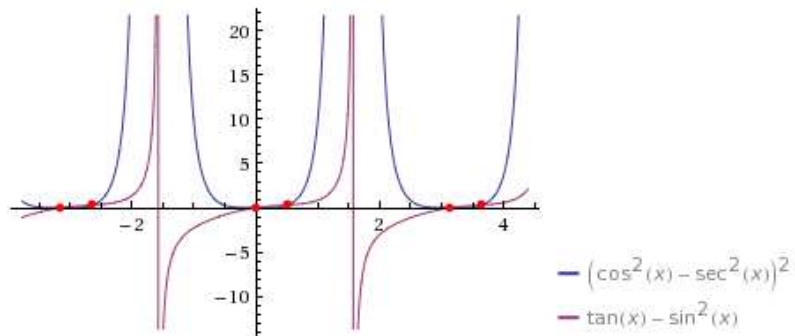


$$\left(\frac{1}{\cos^2 \theta} - \cos^2 \theta\right)^2 = \tan \theta - \sin^2 \theta$$

We can solve it graphically:



And we have next solutions:

$$\begin{cases} \theta = \pi k, k \in \mathbb{Z} \\ \theta = 2(\pi m - 1.31182), m \in \mathbb{Z} \\ \theta = 2(\pi n + 0.258974), n \in \mathbb{Z} \\ \theta \in [0, 2\pi] \end{cases} \Rightarrow \theta = \{0, 0.517948, \pi, 3.65954, 2\pi\}.$$

Answer:  $\theta = \{0, 0.517948, \pi, 3.65954, 2\pi\}.$