

A parametric form of the **FERMAT** equation ?

Jean BÉNICHOU

$$\begin{aligned}x &= n \sin \theta \\ y &= n \cos \theta\end{aligned}$$

is the parametric form of a circle equation of radius **n**. The solution to $x^2 + y^2 = n^2$ is a point of the circle.

A critical fact is that

$$\begin{aligned}x &= n (\sin \theta)^{2/p} \\ y &= n (\cos \theta)^{2/p} \\ (0 < \theta < \pi)\end{aligned}$$

*seems to be the parametric form of the **FERMAT** equation*
 $x^p + y^p = n^p$.

It would follow immediately that $p > 2$ is impossible.