

Class Discussion

Unit 9 Topic 7 Part 2 Conics in the polar coordinate plane

Explain why $r = \frac{ep}{1 \pm e \cos \theta}$ or $r = \frac{ep}{1 \pm e \sin \theta}$ can represent ellipses, parabolas, hyperbolas?

Prove: $r = \frac{ep}{1 + e \cos \theta}$ by converting the polar equation into the rectangular equation.