

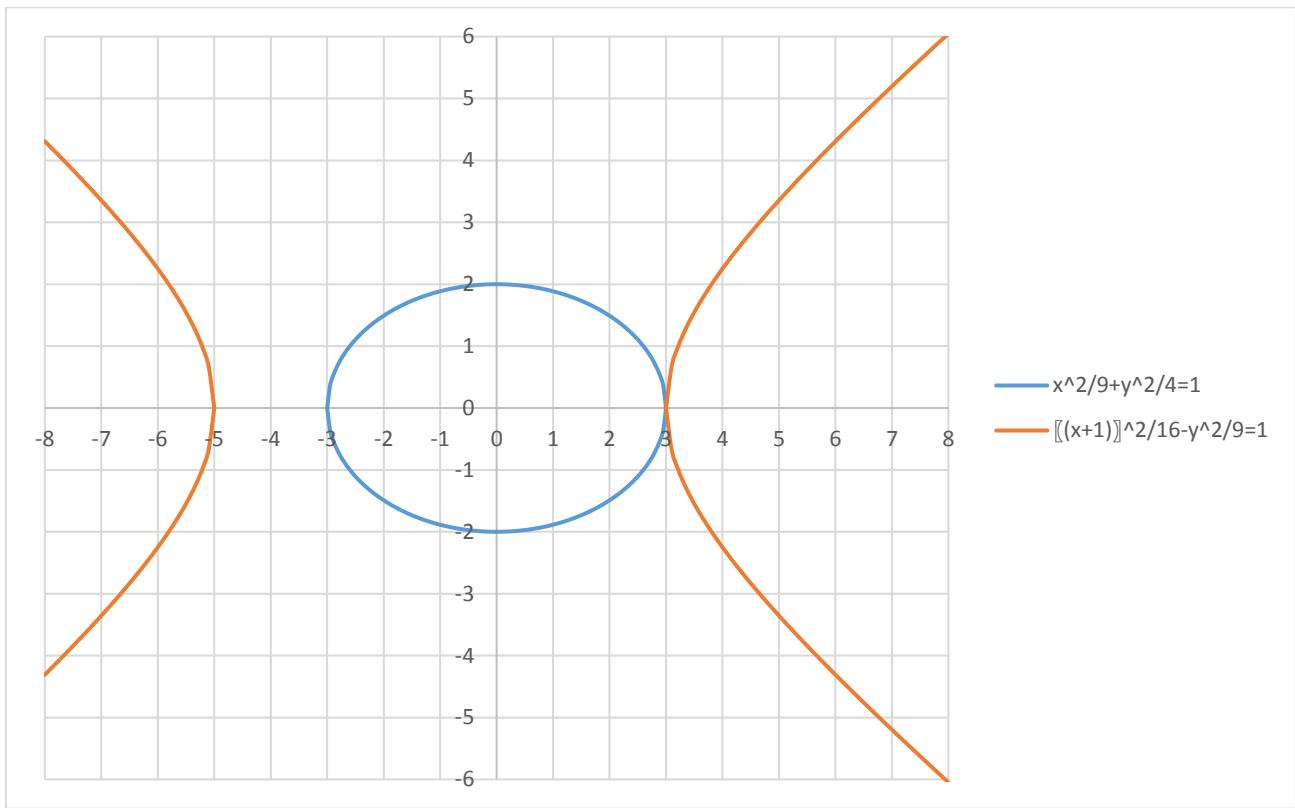
Question:

How many points lie on plane curves $\frac{x^2}{9} + \frac{y^2}{4} = 1$ and $\frac{(x+1)^2}{16} - \frac{y^2}{9} = 1$

(a)1 (b) 2 (c)3 (d)4 (e)0

Solution:

Equation $\frac{x^2}{9} + \frac{y^2}{4} = 1$ is an ellipse and equation $\frac{(x+1)^2}{16} - \frac{y^2}{9} = 1$ is a hyperbola. Let's build graphs of these two equations in the same coordinate system.



These curves have one common point.

Answer: (a) 1

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