

NAME _____

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MATH 124 — QUIZ X

A carpenter wants to make the largest possible ellipse out of a rectangular piece of plywood which is $4ft$ by $8ft$.

→ Choose an appropriate coordinate system to describe the ellipse he will draw, and describe how those coordinates are set up.

⇒ Write the equation of the ellipse in your chosen coordinates.

↔ Where should the foci of this ellipse be?

→ How long should the string be he uses to sketch out the ellipse?

→ What will be the eccentricity of this ellipse?