

Name: _____

Math 124 Quiz 5

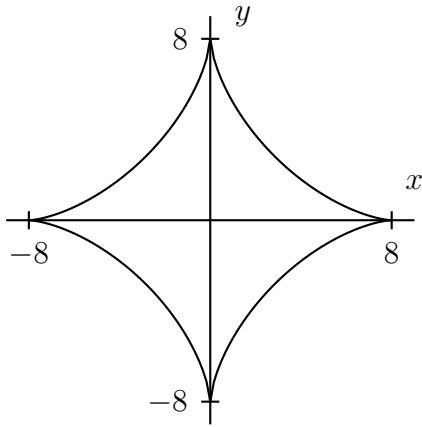
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Instructions: No notes or calculators allowed. Please turn off all cell phones and pagers. Make sure you do both sides of this.

1. (5 points) Use implicit differentiation to find all points on the curve

$$x^{2/3} + y^{2/3} = 4$$

where the tangent line has slope 1. The curve is called an “astroid”; here is a graph:



2. (5 points) Let $f(x) = xe^{2x}$. Find $f''(0)$.