

Name _____

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Honors Pre-Calculus Test

Sections 4.1–4.4

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3. Find θ between 0 and 2π that has the following properties: $\cot \theta = 0$; $\sin \theta < 0$.
Explain the reasoning used to arrive at your answer.

4. For any angle θ , prove an algebraic relationship between $(\sin \theta)^2$ and $(\cos \theta)^2$.

Part C. Transformations and modeling

1. Identify the transformations needed to transform the graph of $y = 5 \cos(3\theta)$ into the graph of $y = \cos(3\theta + 6)$.

