RIDDLE **NAME** _____
PRE-CALCULUS
FINAL EXAM PRACTICE

1. Graph: $y = 2\cos\left(\frac{\theta}{4} + \pi\right) - 1$

2 - 3. Graph and analyze all six trig functions.

4 - 7. Verify Trig Identities

$$\frac{\cos^4 x - \sin^4 x}{\cos^2 x} = 1 - \tan^2 x$$

$$\frac{\sin\theta}{1+\cos\theta} + \frac{1+\cos\theta}{\sin\theta} = 2\csc\theta$$

$$\sec x + \tan x = \frac{1}{\sec x - \tan x}$$

tan x sin x + cos x = sec x

$$\frac{\csc x - 1}{\cot x} = \frac{\cot x}{\csc x + 1}$$

8 - 9. Graph polar graphs: r = 1 + 3sinθ; r = 4sin2θ, r = -2 – 2cos θ, r = 2θ

10. Geometric Vectors

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