

Name _____ Score _____/10

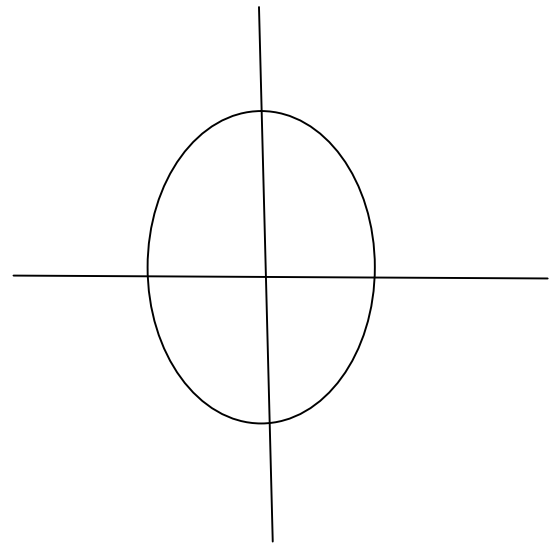
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Show your work neatly and well organized.

1. 1) To find the all solutions of $5\sin(\theta) - 3 = 0$ in the interval $[0, 2\pi]$ we would write

$$\sin(\theta) = \frac{3}{5}.$$

Then we would use the inverse sin function to obtain $\theta = \sin^{-1}(\sin(\theta)) = \sin^{-1}\left(\frac{3}{5}\right) \approx 36.87^\circ$.

Complete the analysis to find all solutions in the interval $[0, 2\pi]$. Make sure that you justify your answer.



2) Find all **EXACT** solution of $\sin^2(x) - \sin(x)\cos(x) = 0$ in the interval $[0, 2\pi]$.