

Game Midterm Review

Midterm Review

Precalculus



1. Name the conic: $9y^2 - 4x^2 + 8x - 36y + 1 = 5$

2. Solve for x. $\begin{vmatrix} x & -3 \\ 4 & 2 \end{vmatrix} = 6 - 3x$

3. The point $(-6, -6)$ is on the terminal side of an angle in standard position. Find Cosecant.

Game Midterm Review

4. Find the coterminal angle between $[0, 2\pi)$.

$$\frac{22\pi}{9}$$

5. Find the reference angle: -205°

6. What is $\csc\left(-\frac{2\pi}{3}\right)$?

7. From the top of a 200 foot lighthouse, the angle of depression to a ship on the ocean is 35° . How far is the ship to the top of the lighthouse? Round to the nearest tenth.

Game Midterm Review

8. Find the area of the triangle with sides 8m, 9m and 10m.

9. Find the measure of the smallest angle in a triangle with sides 8m, 9m and 10m. Round to the nearest tenth.

10. The range of one phase of a cosine function is $[-14, 12]$. What is the vertical shift and amplitude?

11. Find the standard form of the hyperbola:
 $9y^2 - 4x^2 + 8x - 36y + 1 = 5$

Game Midterm Review

12. If secant is undefined, what are the possible angle measures from $[0, 2\pi)$?

13. JimBob's house is 12 miles east and 7 miles south of Pope. What bearing should JimBob take if he walks from his house directly to Pope? Round to the tenth.

14. In triangle CAB with $A = 30^\circ$, $a = 5\text{cm}$ and $b = 3\text{cm}$, find B. Round to the tenth.