

Trigonometry

Name: _____

Study Guide 11

Class: _____

Due Date: _____

Score: _____

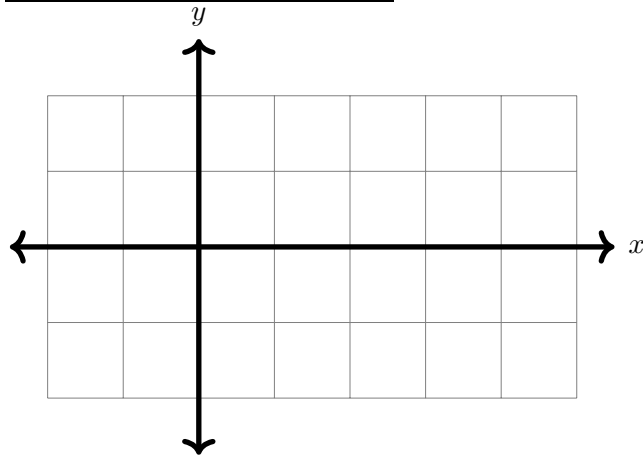
No Work ⇔ No Points

Use Pencil Only ⇔ Be Neat & Organized

1. (6 points) Complete the charts below, then graph $y = 2 \csc(2\pi x)$, and clearly mark all relevant information.

Amplitude	
Phase Shift	
Vertical Shift	

Key x -values					



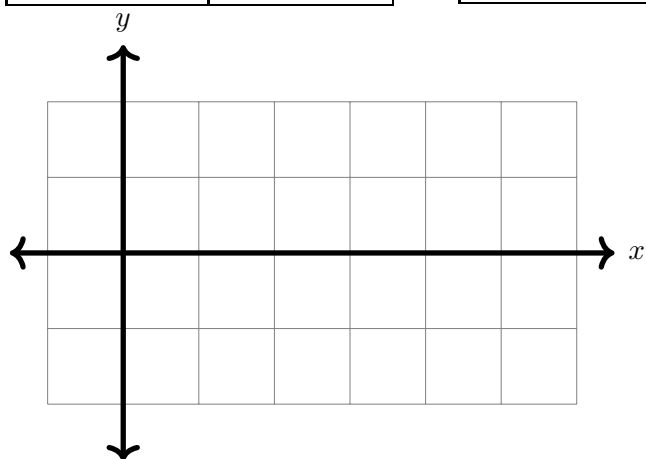
2. (3 points) Convert 48.625° to DMS.

2. _____

3. (6 points) Complete the charts below, then graph $y = 2 \sec(2x - \pi) - 1$, and clearly mark all relevant information.

Amplitude	
Phase Shift	
Vertical Shift	

Key x -values					



4. (3 points) Convert $54^\circ 18' 25''$ to degrees in decimal.

4. _____

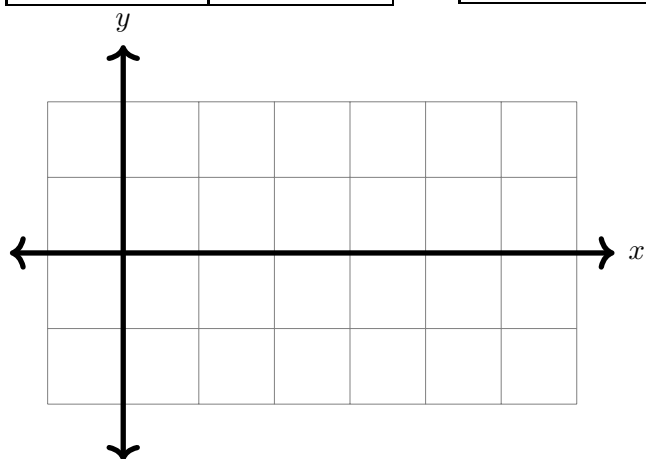
5. (3 points) Convert 105.875° to DMS.

5. _____

6. (6 points) Complete the charts below, then graph $y = \cot(0.5\pi x)$, and clearly mark all relevant information.

Amplitude	
Phase Shift	
Vertical Shift	

Key x -values			



7. (4 points) Simplify: $35^\circ 40' 45'' + 75^\circ 55' 35''$

7. _____

8. (4 points) Simplify: $75^\circ 40' 45'' - 28^\circ 55' 35''$

8. _____

9. (3 points) Find the exact value of $\cos(2x)$ given $\csc x = \frac{-5}{3}$ and $180^\circ < x < 270^\circ$.

9. _____

10. (3 points) Find the exact value of $\cot(2x)$ given $\tan x = -5$ and $90^\circ < x < 180^\circ$.

10. _____

11. (2 points) Verify that $\frac{\sin 10x}{\sin 5x \cos 5x} = 2$

12. (3 points) Verify that $\frac{\cos 10x}{\cos 5x - \sin 5x} = \cos 5x + \sin 5x$

13. (4 points) Verify that $\frac{\tan x - \cot x}{\tan x + \cot x} = -\cos 2x$
