

Trigonometry

Name: _____

Study Guide 16

Class: _____

Due Date: _____

Score: _____

No Work \Leftrightarrow No Points

Use Pencil Only \Leftrightarrow Be Neat & Organized

1. (3 points) Find the exact value of $\sin\left(\cos^{-1}\frac{2}{3}\right)$.

1. _____

2. (3 points) Find the exact value of $\tan\left(\sin^{-1}\frac{-3}{7}\right)$.

2. _____

3. (4 points) Find the exact value of $\cos\left(\sin^{-1}\frac{3}{5} - \cos^{-1}\frac{5}{13}\right)$.

3. _____

4. (3 points) Find all solutions for $\sqrt{2}\sin x - 1 = 0$.

4. _____

5. (3 points) Find all solutions for $2\cos x + \sqrt{3} = 0$.

5. _____

6. (3 points) Find all solutions for $2\sin x \tan x = \tan x$.

6. _____

7. (4 points) Find all solutions for $\cos x \tan^2 x = \cos x$.

7. _____

8. (4 points) Find all solutions for $2 \sin^2 x - 1 = \sin x$.

8. _____

9. (4 points) Find all solutions for $\cos^2 x + 1 = 2 \cos x$.

9. _____

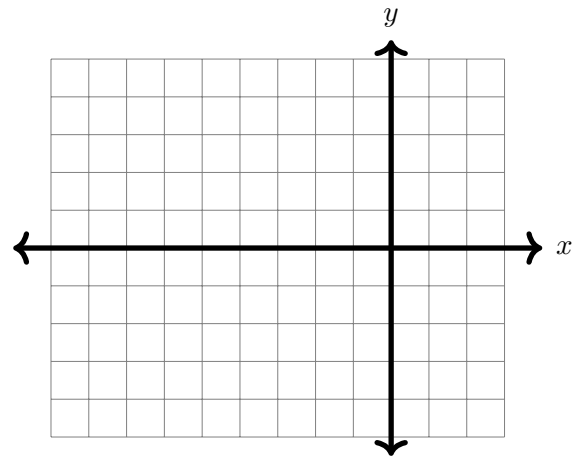
10. (4 points) Find all solutions for $\sin x - \cos x = 0$.

10. _____

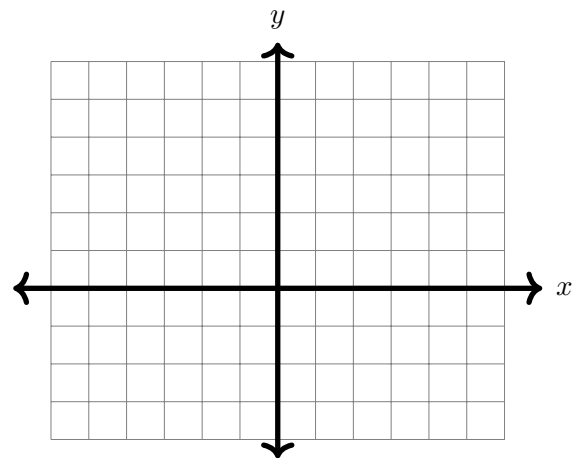
11. (3 points) Find the exact value of $\tan 2x$ given that $\sin x = -\frac{12}{13}$, and $\pi < x < \frac{3\pi}{2}$.

11. _____

12. (4 points) Graph $y = 2\sin^{-1}(x + 2)$, and clearly mark relevant information.



13. (4 points) Graph $y = \frac{\pi}{2} + \cos^{-1}\frac{x}{3}$, and clearly mark relevant information.



14. (4 points) Graph $y = -\frac{\pi}{2} + \tan^{-1}\frac{x}{2}$, and clearly mark relevant information.

