October 18

If you could change one thing about this class, what would it be? What is one thing you would keep the same?

October 18

Students will verbally explain how to graph all six trig functions

(using the words:
zero, asymptote, undefined...)

3. Bryan is standing 2,000 feet from objects A and C. The observed angle between the objects is 48°. How far apart are objects A and C?

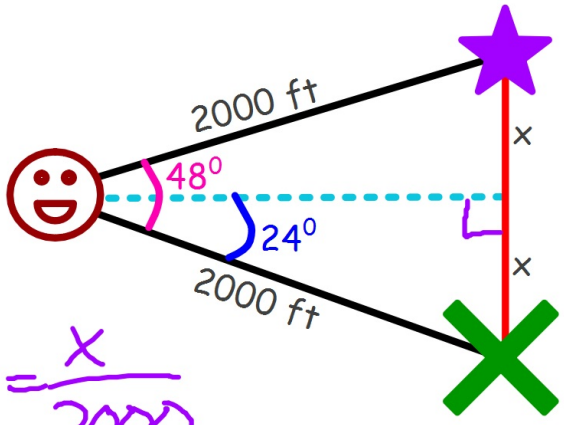
(A) 4,000 sin 24°

(B) 2,000 sin 48°

(C) 4,000 sin 48°

(D) 2,000 sin 24°

(E) 2,000 cos 48°

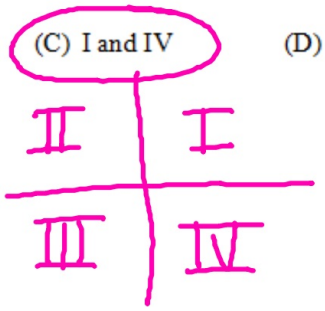


$\sin(24) = \frac{x}{2000}$

$2000 \sin(24) = x$

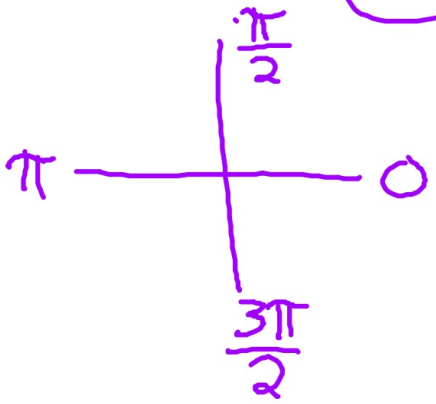
5. In what quadrants is the $\cos(\theta)$ positive?

(A) I and II (B) I and III (C) I and IV (D) II and III (E) II and IV



6. Which angle is in the third quadrant?

(A) $-\frac{11\pi}{6}$ (B) $-\frac{\pi}{6}$ (C) $\frac{5\pi}{6}$ (D) $\frac{7\pi}{6}$ (E) $\frac{23\pi}{6}$



$\frac{12\pi}{6} + \frac{11\pi}{6}$

$y = 3\sin(4x - \pi) + 7$

$-3 \le y \le 3$

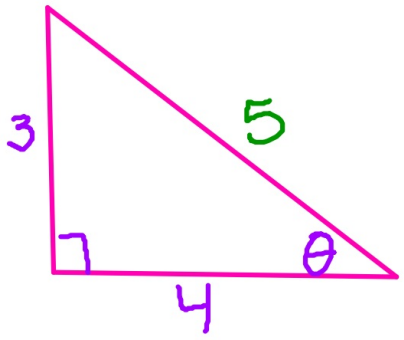
$+7 \quad +7$

$4 \le y \le 10$

$\tan\theta = \frac{3}{4}$

$\sec\theta = ?$

$\sec\theta = \frac{5}{4}$



$$\begin{array}{r} 4x^3 - 2x^2 \\ -3x^3 + 3x^2 \\ -2x^3 - 4x^2 \\ \hline -x^3 - 3x^2 \end{array}$$

7. Evaluate:

(a) $\cos\left(\frac{5\pi}{4}\right) = -\frac{\sqrt{2}}{2}$

(b) $\sin\left(\frac{-2\pi}{3}\right) = \sin\left(\frac{-2\pi}{3} + 2\pi\right) = \sin\left(\frac{4\pi}{3}\right) = -\frac{\sqrt{3}}{2}$

(c) $\tan\left(\frac{23\pi}{6}\right)$

7. Evaluate:

(a) $\sin\left(\frac{7\pi}{4}\right) = -\frac{\sqrt{2}}{2}$

(b) $\cos\left(\frac{-5\pi}{6}\right)$

(c) $\tan\left(\frac{10\pi}{3}\right) = \tan\left(\frac{10\pi}{3} - 2\pi\right) = \tan\left(\frac{4\pi}{3}\right) = \sqrt{3}$

$\frac{6\pi}{3}$

Equation	Graph	Description of Graph	Endpoints or Midpoint
$y = 3\sin\left(\frac{x}{2}\right) - 1$			
$y = -2\sin(\pi x + 1)$			
$y = 3\csc(\pi x)$			
$y = -3\sec\left(\frac{1}{4}\left(x - \frac{\pi}{4}\right)\right) - 3$			
$y = 2\sec(2x)$			
$y = -3\cos\left(x + \frac{\pi}{4}\right)$			
$y = 2\csc\left(x - \frac{\pi}{3}\right) + 3$			
$y = 2\cos(\pi x) + 3$			