Name : _____

Solve - Cofunction Identities

Radians: S3

Solve using cofunction identities.

1) $\sec\frac{\pi}{16} = \csc\left(x + \frac{\pi}{4}\right)$

2) $\cos\left(\frac{7\pi}{20} - 13x\right) = \sin\left(\frac{\pi}{12} + 19x\right)$

3) $\cot\left(x + \frac{5\pi}{12}\right)$ c x

5) $\sin\left(\frac{\pi}{48} + \frac{5x}{7}\right)$ ot $\frac{\pi}{5} + 2x$

7) $\tan\left(x - \frac{\pi}{31}\right) = \cot\frac{\pi}{2}$

8) $\csc\left(\frac{\pi}{15} + 4x\right) = \sec\left(3x + \frac{\pi}{12}\right)$

Name : _____

Answer key

Solve - Cofunction Identities

Radians: S3

Solve using cofunction identities.

1) $\sec\frac{\pi}{16} = \csc\left(x + \frac{\pi}{4}\right)$

$x = \frac{3\pi}{16}$

2) $\cos\left(\frac{7\pi}{20} - 13x\right) = \sin\left(\frac{\pi}{12} + 19x\right)$

$x = \frac{\pi}{90}$

3) $\cot\left(x + \frac{5\pi}{12}\right)$ c x

$x = \frac{\pi}{24}$

$\frac{\pi}{0}$

5) $\sin\left(\frac{\pi}{48} + \frac{5x}{7}\right)$ $\cot\frac{\pi}{5} + 2x$

$x = \frac{7\pi}{16}$

$\frac{\pi}{0}$

7) $\tan\left(x - \frac{\pi}{31}\right) = \cot\frac{\pi}{2}$

$x = \frac{\pi}{31}$

8) $\csc\left(\frac{\pi}{15} + 4x\right) = \sec\left(3x + \frac{\pi}{12}\right)$

$x = \frac{\pi}{20}$