

Solving Trigonometric Equations

Solve each equation on the interval $0 \leq x \leq 2\pi$.

1) $\sqrt{3} \sec^2 x + 2 \sec x - \sqrt{3} \sec x - 2 = 0$ 2) $4 \csc^2 x + 12 \csc x + 8 = 0$

3) $2 \sin^2 x - 3 \sin x + 2 = 2 \sin^2 x$

5) $2 \tan^2 x - 3 \sec x + 5 \cos x = 5$

PREVIEW

Gain complete access to the largest
collection of worksheets in all subjects!

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

www.mathworksheets4kids.com

Solving Trigonometric Equations

Solve each equation on the interval $0 \leq x \leq 2\pi$.

1) $\sqrt{3} \sec^2 x + 2 \sec x - \sqrt{3} \sec x - 2 = 0$ 2) $4 \csc^2 x + 12 \csc x + 8 = 0$

$0, \frac{5\pi}{6}, \frac{7\pi}{6}$

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

PREVIEW

3) $2 \sin^2 x - 3 \sin x = 2 \sin^2 x$

$= 2 \sin^2 x$

Gain complete access to the largest
collection of worksheets in all subjects!

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

$\frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6}$

$\frac{4\pi}{3}$

5) $2 \tan^2 x - 3 \sec x = 5 \cos x = 5$

$5 \cos x = 5$

www.mathworksheets4kids.com

$0, 2\pi$

$\frac{\pi}{3}, \pi, \frac{5\pi}{3}$