

Daily Agenda

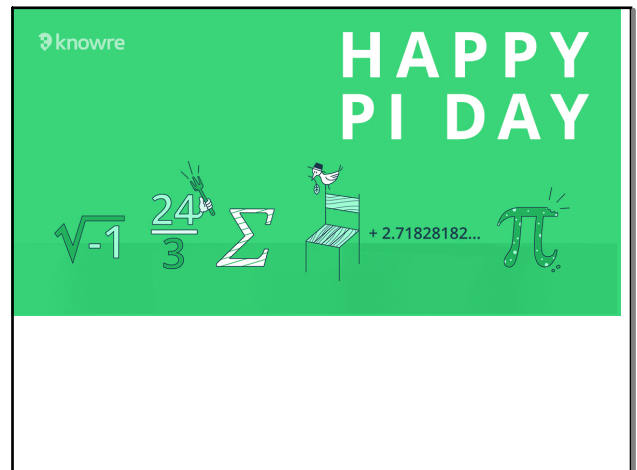
Learning Target: I can solve trig equations in the indicated domain.

**Homework**  
8.8 Worksheet Day 3

**Assessments**  
Unit 8B Test - 3/17

Happy Pi Day

Nov 15-8:24 PM



Mar 14-7:04 AM

The computation of  $\pi$  is virtually the only topic from the most ancient stratum of mathematics that is still of serious interest to modern mathematical research.  
-Len Berggren

You can determine your hat size by measuring the circumference of your head, dividing by  $\pi$ , and then rounding to the nearest eighth of an inch.  
-The Joy of Pi

Mar 14-7:51 AM

8.8 Solving Trig Equations

Solve the equation in the indicated domain

$$\sin 2x \cos 15^\circ + \cos 2x \sin 15^\circ = \frac{\sqrt{2}}{2} \quad x \in [0^\circ, 360^\circ)$$

$$\sin(2x + 15^\circ) = \frac{\sqrt{2}}{2}$$

$2x + 15^\circ = 45^\circ + 360n$ $\underline{-15 \quad -15}$ $\frac{2x}{2} = \frac{30^\circ + 360n}{2}$ $x = 15^\circ + 180n$ $x = 15^\circ, 195^\circ,$	$2x + 15^\circ = 135^\circ + 360n$ $\underline{-15 \quad -15}$ $\frac{2x}{2} = \frac{120^\circ + 360n}{2}$ $x = 60^\circ + 180n$ $x = 60^\circ, 240^\circ$
---	--

Mar 15-9:06 AM