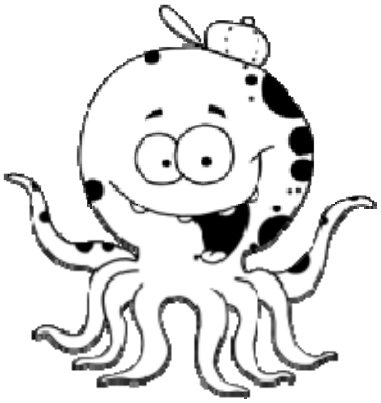
Name _____ Date _____

Symmetry of the Unit Circle and Odd-Even Properties - Step-by-Step Lesson

Find the value of $\sin(-\frac{\pi}{4})$



Explanation:

The sine function f(t) = sin t is odd and the cosine function g(t) = cos t is even; that is, for every real number t,

$\text{Sin}(-\frac{\pi}{4}) = -\sin\frac{\pi}{4} = -\frac{\sqrt{2}}{2}$

$\text{Cos}\ (-\frac{\pi}{4}) = \cos\frac{\pi}{4} = \frac{\sqrt{2}}{2}$

Note that the signs of the answers are consistent with the fact that the terminal side of the angle –Π/4 radian lies in quadrant IV.