

Answer on Question #41691, Math, Statistics and Probability

How do you find

- a. $\cot x = \sqrt{3}$
- b. $1/\cos x = -1/4$

Answer in radians.

Solution

- a. If $\cot x = \sqrt{3}$ then
$$x = \cot^{-1} \sqrt{3} + \pi n = \frac{\pi}{6} + \pi n, \text{ where } n \text{ is integer.}$$
- b. If $\frac{1}{\cos x} = -\frac{1}{4}$ then $\cos x = -4$. This equation has no solution because range of cosine is $[-1;1]$.