Submit your solutions before the finishing date to the address: ProbOfTheWeek@utdallas.edu

## Problem of the Week

Finishing date: 11/25/2015

Find all real roots of the following equation:

$$
x^{2}+\frac{1}{x}+7(x+1)=8 \sqrt{2\left(x^{2}+1\right)}
$$

## Previous problem winners:

Zachary Hancock (first solution), and Brendan Caseria.


