

### Problem 7: Solve the system

---

Find all real solutions to the following system of equations

$$\begin{aligned}x + y &= \sqrt{4z - 1} \\y + z &= \sqrt{4x - 1} \\z + x &= \sqrt{4y - 1}\end{aligned}$$

As always, show your work, fully explain and justify your answer.

---

Posting Date 11/26/2017. Submit solutions to Noah Aydin, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 12/07/2017.