Problem of the Week-5: A Radical System of Equations

Find all real solutions to the system of equations

$$x + y = \sqrt{4z - 1}$$
$$y + z = \sqrt{4x - 1}$$
$$z + x = \sqrt{4y - 1}$$

Of course, explain how you obtained your answer.

Posting Date 10/25/2010. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 11/05/2010.