Math 115 Quiz 5 - August 4, 2010 Name_____

The continued fraction expansion of $\sqrt{7}$ is $[2, \overline{1, 1, 1, 4}]$. Circle and do ONE of the following two problems:

(a) Find TWO positive solutions to $x^2 - 7y^2 = 1$.

(b) Find a rational number which is within $\frac{1}{1000}$ of $\sqrt{7}$ and prove it is within $\frac{1}{1000}$ of $\sqrt{7}$.