13. Suppose that $x - \frac{1}{x} = y - \frac{1}{y}$ and $x \neq y$. What is the value of xy?

A 4 B 1 C -1 D -4 E more information is needed

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13. C $x - \frac{1}{x} = y - \frac{1}{y}$ hence $x^2y - y = xy^2 - x$. Thus $xy(y - x) + y - x = 0$.
Therefore $(y - x)(xy + 1) = 0$. As $x \neq y$ then $y - x \neq 0$.
Hence $xy + 1 = 0$ giving $xy = -1$.