$$\begin{vmatrix}
1 & | 4 \rangle & | 1 & | 2 \rangle & | \frac{1}{2} & | 3 \rangle \\
| 1 & | 2 \rangle & | 1 & | 2 \rangle & | \frac{1}{2} & | 3 \rangle
\end{vmatrix}$$