

The $A367529(2) = 68$ ways of tiling the 2×2 grid by tiles in $\left\{ \begin{array}{|c|c|} \hline \blacksquare & \square \\ \hline \blacksquare & \square \\ \hline \end{array} \right\}, \left\{ \begin{array}{|c|c|} \hline \square & \blacksquare \\ \hline \square & \blacksquare \\ \hline \end{array} \right\}, \left\{ \begin{array}{|c|c|} \hline \square & \square \\ \hline \blacksquare & \blacksquare \\ \hline \end{array} \right\}, \left\{ \begin{array}{|c|c|} \hline \blacksquare & \blacksquare \\ \hline \square & \square \\ \hline \end{array} \right\}$ up to diagonal and antidiagonal reflection:

