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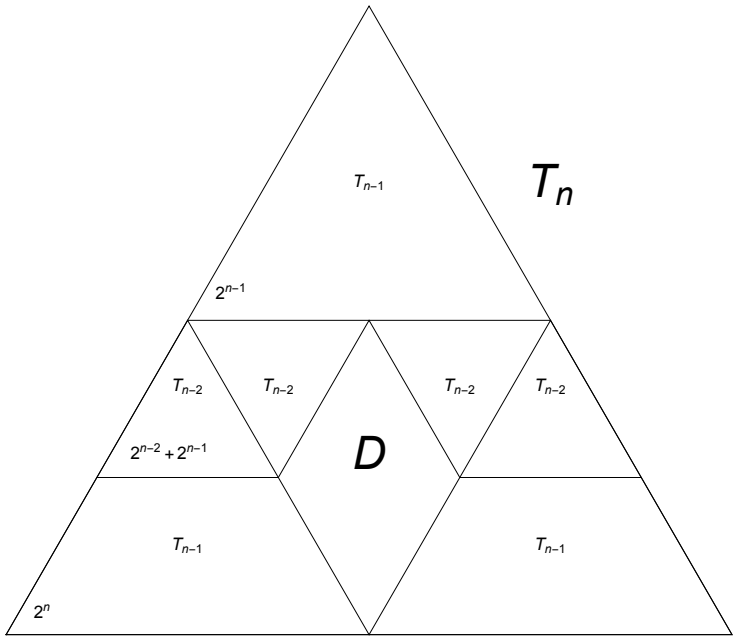
Apr 14 2020



Since the level at 2^{n-1} at the bottom of the top triangle T_{n-1} is full so the level $2^{n-1}+2$ will be full. When the generations have progressed to the bottoms of the four triangles T_{n-2} none of the cells in the lower diamond D are ON. Also, none of the levels in the upper half of the diamond D will become full since the diagonal bottoms of the two inner triangles T_{n-2} that meet at the center at level 2^{n-1} are full sections so that their adjacent sections inside diamond D will stay OFF. As the generations proceed down to the bottom level 2^n each level that is full in the bottom halves of the two lower companion triangles T_{n-1} will be filled across the diamond D, so that their entire matching levels will be filled. Therefore, the lower half of triangle T_n will have the additional n-1 filled levels at:
$2^{n-1}+2$, $2^{n-1}+2+2^{n-2}$, $2^{n-1}+2+2^{n-2}+2^{n-3}$, ... , $2^{n-1}+2+\sum_{k=2}^{n-1} 2^{n-k} = 2^n$.