Erratum: Two-Dimensional Monomer-Dimer Systems are Computationally Intractable¹

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I am greatly indebted to Scott Provan for pointing out a flaw in one of the constructions employed in the above paper. The flaw lies in the graph Δ_2 presented in Fig. 2. This graph is intended, in the terminology of the paper, to have matching polynomial $P(\Delta_2; x, y, z) = 2(1 + xyz)$. In fact, the matching polynomial of Δ_2 also includes some spurious degree-2 terms, in contradiction of Eq. (3).

To correct the construction, the graph depicted in the original Fig. 2 should be augmented with three extra edges, so that it corresponds with the revised Fig. 2 given here. The matching polynomial of the revised

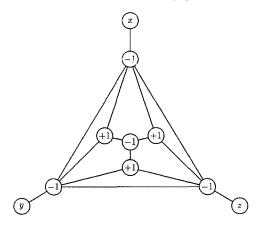


Fig. 2 (revised). The graph Δ_2 .

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version of Δ_2 is now exactly as claimed in Eq. (3), and no changes are necessary in the *text* of the paper. However, the graph Γ depicted in Fig. 3 contains three copies of the flawed version of Δ_2 , and hence should be modified accordingly. I apologize to any reader who was prevented, by this error, from following the detailed argument of the paper.