Erratum

On Light Graphs in 3-Connected Plane Graphs Without Triangular or Quadrangular Faces: A Correction

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In our paper [1] there is, unfortunately, a gap in the proof. In Section 4, Fig. 5 is not applicable when r is 6 or 7. A correction is as follows:

Section 4, line 3: Replace “three” by “four”.

Section 4, line -2: Replace “3,4,6,7” by “3,4”.

Add the fourth case as follows:

Case $r \in \{6, 7\}$. For $m > 3$, take an m -gonal bipyramid and subdivide every edge incident with a vertex of degree m with a new vertex so that all faces of the resulting graph are pentagons. Then replace each pentagon by the configuration shown in Fig. 5a, with the vertex A placed at the vertex of degree m .

Fig. 1.

Note. This error was already observed in [2] by B. Mohar but without a proposal how to fix the error.

References

1. Jendrol', S., Owens, P.J.: On light graphs in 3-connected plane graphs without triangular or quadrangular faces. *Graphs Comb.* **17**, 659–680 (2001)
2. Mohar, B.: *Mathematical Reviews* #2002j:05046 AMS, 2002

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