



## Correction to: Gallai–Ramsey Numbers for a Class of Graphs with Five Vertices

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### Correction to: Graphs and Combinatorics <https://doi.org/10.1007/s00373-020-02194-5>

In the original publication of the article, few errors have occurred. The corrections are given below:

1. Page 3, Theorem 2:

$$gr_k(K_3 : F_9) = gr_k(K_3 : F_{10}) = \begin{cases} 8 \cdot 5^{(k-2)/2} + 1, \\ 4 \cdot 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$gr_k(K_3 : F_9) = gr_k(K_3 : F_{10}) = \begin{cases} 8 \cdot 5^{(k-2)/2} + 1, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

2. Page 3, Theorem 4 (3):

$$k(n-1) + 2 \geq gr_k(K_3 : F_{2,n}) \geq \begin{cases} \frac{5n}{2} + k - 6, \\ \frac{5n-1}{2} + k - 4, \end{cases}$$

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The original article can be found online at <https://doi.org/10.1007/s00373-020-02194-5>.

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should be

$$k(n-1) + 2 \geq gr_k(K_3 : F_{2,n}) \geq \begin{cases} \frac{5n}{2} + k - 6, & \text{if } n \text{ is even,} \\ \frac{5n-1}{2} + k - 4, & \text{if } n \text{ is odd.} \end{cases}$$

3. Page 4, Theorem 5:

$$gr_k(K_3 : F_{12}) = gr_k(K_3 : F_{13}) = \begin{cases} 9 \cdot 5^{(k-2)/2} + 1, \\ 4 \cdot 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$gr_k(K_3 : F_{12}) = gr_k(K_3 : F_{13}) = \begin{cases} 9 \cdot 5^{(k-2)/2} + 1, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

4. Page 5, Lemma 2:

$$gr_k(K_3 : K_3) = \begin{cases} 5^{k/2} + 1, \\ 2 \cdot 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$gr_k(K_3 : K_3) = \begin{cases} 5^{k/2} + 1, & \text{if } k \text{ is even,} \\ 2 \cdot 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

5. Page 5, Lemma 3:

$$gr_k(K_3 : F_9) > \begin{cases} 8 \cdot 5^{(k-2)/2}, \\ 4 \cdot 5^{(k-1)/2}, \end{cases}$$

should be

$$gr_k(K_3 : F_9) > \begin{cases} 8 \cdot 5^{(k-2)/2}, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2}, & \text{if } k \text{ is odd.} \end{cases}$$

6. Page 5, Lemma 4:

$$gr_k(K_3 : F_{10}) \leq \begin{cases} 8 \cdot 5^{(k-2)/2} + 1, \\ 4 \cdot 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$gr_k(K_3 : F_{10}) \leq \begin{cases} 8 \cdot 5^{(k-2)/2} + 1, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

7. Page 5, Proof of lemma 4:

$$n = \begin{cases} 8 \cdot 5^{(k-2)/2} + 1, \\ 4 \cdot 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$n = \begin{cases} 8 \cdot 5^{(k-2)/2} + 1, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

8. Page 6:

$$gr_{k-1}(K_3 : K_3) = \begin{cases} 2 \cdot 5^{(k-2)/2} + 1, \\ 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$gr_{k-1}(K_3 : K_3) = \begin{cases} 2 \cdot 5^{(k-2)/2} + 1, & \text{if } k \text{ is even,} \\ 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

9. Page 9:

$$|V(G_k)| = \begin{cases} \frac{5n}{2} + k - 7, \\ \frac{5n - 1}{2} + k - 5, \end{cases}$$

should be

$$|V(G_k)| = \begin{cases} \frac{5n}{2} + k - 7, & \text{if } n \text{ is even,} \\ \frac{5n - 1}{2} + k - 5, & \text{if } n \text{ is odd.} \end{cases}$$

10. Page 9:

$$n_k = \begin{cases} r_2(F_{2,n}) + k - 2, \\ k + 9, \\ k(n - 1) + 2, \end{cases}$$

should be

$$n_k = \begin{cases} r_2(F_{2,n}) + k - 2, & \text{if } n \in \{3, 4\} \text{ and } k \geq 1, \\ k + 9, & \text{if } n = 5 \text{ and } k \geq 2, \\ k(n - 1) + 2, & \text{if } n \geq 6 \text{ and } k \geq 2. \end{cases}$$

11. Page 11, Lemma 6:

$$gr_k(K_3 : H) > \begin{cases} 9 \cdot 5^{(k-2)/2}, \\ 4 \cdot 5^{(k-1)/2}, \end{cases}$$

should be

$$gr_k(K_3 : H) > \begin{cases} 9 \cdot 5^{(k-2)/2}, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2}, & \text{if } k \text{ is odd.} \end{cases}$$

12. Page 11–12, Lemma 7:

$$gr_k(K_3 : H) \leq \begin{cases} 9 \cdot 5^{(k-2)/2} + 1, \\ 4 \cdot 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$gr_k(K_3 : H) \leq \begin{cases} 9 \cdot 5^{(k-2)/2} + 1, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

13. Page 12, Proof of Lemma 7:

$$n = \begin{cases} 9 \cdot 5^{(k-2)/2} + 1, \\ 4 \cdot 5^{(k-1)/2} + 1, \end{cases}$$

should be

$$n = \begin{cases} 9 \cdot 5^{(k-2)/2} + 1, & \text{if } k \text{ is even,} \\ 4 \cdot 5^{(k-1)/2} + 1, & \text{if } k \text{ is odd.} \end{cases}$$

The original article has been corrected.

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