CORRECTIONS:

GENERALIZED RAMSEY THEORY FOR GRAPHS V

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At the end of our paper [**2**] we presented two tables of Ramsey numbers for small digraphs. These contain several errors which we correct here. We follow the notation of [**2**].

J. C. Bermond [**1**] independently studied the Ramsey number of a digraph and informed us privately of the following required corrections:

$$r(P_3, D_2) = r(S_2, D_2) = r(S_2', D_2) = 5.$$

Furthermore, the following values also need to be corrected:

$$r(S_2, DK_3) = r(S_2', DK_3) = 7 \quad \text{and} \quad r(E_7) = 8.$$

The two tables in [**2**] should be replaced by the following values of Ramsey numbers for small digraphs; corrected values are in bold type.

$r(D_1, D_2)$

	P_2	P_3	S_2	S_2'	T_3	DK_2	DK_3	C_3	D_1	D_1'	D_2	D_3	D_4	D_4'	D_5
P_2	2	3	3	3	3	2	3	3	3	3	3	3	3	3	3
P_3		3	3	3	5	3	5	5	4	4	**5**	5	5	5	5
S_2			4	4	5	4	**7**	5	4	4	**5**	5	5	5	5
S_2'				4	5	4	**7**	5	4	4	**5**	5	5	5	5
T_3					6	4	9	6	5	5	7	7	6	6	7

D	P_2	P_3	S_2	T_3	P_4	E_1	E_2	E_3	S_3	E_4	E_5
$r(D)$	2	3	4	6	5	5	5	5	6	6	6

D	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}	E_{13}	E_{14}	T_4
$r(D)$	6	**8**	7	7	7	10	10	10	10	18

Note that given a graph G, its acyclic orientations $D_1, D_2, \ldots, D_k$ need not have Ramsey numbers which are consecutive integers. In fact, the acyclic orientations of the quadrilateral graph are E_5, E_6, E_7 and their Ramsey numbers are 6, 6 and 8.

The proofs of these results are too long to be presented here. A pamphlet containing all the verifications can be obtained from the authors; it also contains a short proof of the claim made in [**2**] that

$$r(T_3, DK_4) < 18.$$

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References

1. J. C. Bermond, " Some Ramsey numbers for directed graphs ", *Discrete Math.*, 9 (1974), 313–321.
2. F. Harary and P. Hell, "Generalized Ramsey theory for graphs V. The Ramsey number of a digraph ", *Bull. London Math. Soc.*, 6 (1974), 175–182.

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