



UKMT Team Maths Challenge: Regional Final Head-to-head

For the 2009 Regional Finals, this round is being replaced by a new activity similar to the Mini Relay piloted at the 2007 and 2008 National Finals. The material from the 2008 National Final is included on this CD-ROM and further sample materials for use in preparing for the new Regional Head-to-head round will be available from the Team Challenge section of the UKMT website (www.ukmt.org.uk) from early October. An explanation of the new round is included in the 'Team Maths Challenge 2009' document also on this CD-ROM. The old round worked as follows:

Head-to-head Competition (*5 minutes per round, 1 point per correct answer*)

- Teams of four compete against each other, standing in a semi-circle, with team members standing alternately next to each other, so that each team member stands next to a member of the opposing team.
- Teams take turns to guess the numbers that fill the gaps in tables like these, by spotting the rule connecting the top and bottom rows:*

5	2	9	-3	10	21	100	0	1.5	-99
11	5	19	-5						

(Answer - Double top and add 1 to get bottom row, or $y=2x+1$)

- Each competitor in turn gives an answer, and if it is correct, it is written into the grid by the supervising teacher. If it is not correct, the next person gives an answer. If all eight competitors give the wrong answer, the correct answer is written into the grid by the supervising teacher.

* Each round consists of two sheets (e.g. 'Round 1 left' and 'Round 1 right') which are enlarged to A3 and placed side by side.

Round 1 left

4	3	2	10	200	-3
31	22				



Round 1 right

15	-5	13	2.5	12	-11



Round 2 left

This time each number you find depends on the two numbers you are given.

1	2	1	3	5	1
2	1	0	2	1	3
7	8				



Round 2 right

8	4	12	-7	22	-5
-1	3	3	10	22	-6



Round 3 left

5	6	8	-4	11	-1
40	54				



Round 3 right

0	-7	17	-13	-3	9



Round 4 left

4	5	-4	1	3	0
-11	-20				



Round 4 right

-12	15	-13	1.1	16	1.5



Round 5 left

20	26	2	15	23	102
0	36				



Round 5 right

123	345	85	72	67	5214



Round 6 left

6	4	3	10	16	19
2	2				



Round 6 right

29	25	40	48	1	101

