

SWISS CONTEST ROUND 1

Rule: $y = x^2$ backwards

Hints: It all depends on which way you look at it.

BOARD:

$x:$	4	5	11	12	6	3	9	10	8	7	13	15	14	25	19	17
$y:$	61	52	121	441												

TALLY:

ANSWERS

(5 points per correct answer)

SITE	TEAM CODE	$y:$	63	9	18	1	46	94	961	522	691	526	163	982	TOTALS
		Points													
		Points													
Difference:															

VICTORY POINTS:

Team Code

Winner		30 + Difference (max 60) =
Looser		30 – Difference (min 0) =

Note: The Supervisors should emphasise each student will be allowed only one go per turn at each number - no corrections

SWISS CONTEST ROUND 2

Rule: $y =$ seven times sum of digits of x

Hint: The weekly digits seen daily

BOARD:

$x:$	12	62	54	1	45	26	3	47	123	700	99	29	34	78	848	346
$y:$	21	56	63	7												

TALLY:

(5 points per correct answer)

ANSWERS

SITE	TEAM CODE	$y:$	63	56	21	77	42	42	126	77	49	105	140	91	TOTALS
		Points													
		Points													
Difference:															

VICTORY POINTS:

Team Code

Winner		$30 + \text{Difference (max 60)} =$
Looser		$30 - \text{Difference (min 0)} =$

Note: The Supervisors should emphasise each student will be allowed only one go per turn at each number - no corrections

SWISS CONTEST ROUND 3

Rule: $y = \text{integer part of } 2007/x$

Hint: It's been a divisive year on the whole

BOARD:

x:	5	6	7	8	10	20	12	4	3	2	1	11	13	77	91	144
y:	401	334	286	250												

TALLY:

(5 points per correct answer)

ANSWERS

SITE	TEAM CODE	y:	200	100	167	501	669	1003	2007	182	154	26	22	13	TOTALS
		Points													
		Points													
Difference:															

VICTORY POINTS:

Team Code

Winner		30 + Difference (max 60) =
Looser		30 – Difference (min 0) =

Note: The Supervisors should emphasise each student will be allowed only one go per turn at each number - no corrections

SWISS CONTEST ROUND 4

Rule: y = number of ones in the binary representation of x

Hint: Basically sumones working with two

BOARD:

x :	3	4	9	8	11	16	6	15	1024	1	2	100	40	12	13	1023
y :	2	1	2	1												

TALLY:

(5 points per correct answer)

ANSWERS

SITE	TEAM CODE	y :	3	1	2	4	1	1	1	3	2	2	3	10	TOTALS
		Points													
		Points													
Difference:															

VICTORY POINTS:

Team Code

Winner		$30 + \text{Difference (max 60)} =$
Looser		$30 - \text{Difference (min 0)} =$

Note: The Supervisors should emphasise each student will be allowed only one go per turn at each number - no corrections

SWISS CONTEST ROUND 5

Rule: $y = y$ is obtained from x by writing out the prime factorization of x and then replacing each prime by the next larger prime

**Hint: 1. A primary upgrade
2. Reassembled with larger parts**

BOARD:

$x:$	3	4	5	6	7	8	9	10	20	30	33	34	37	39	36	48
$y:$	5	9	7	15												

TALLY:

(5 points per correct answer)

ANSWERS

SITE	TEAM CODE	$y:$	11	27	25	21	63	105	65	57	41	85	225	405	TOTALS
		Points													
		Points													
Difference:															

VICTORY POINTS:

Team Code

Winner		$30 + \text{Difference (max 60)} =$
Looser		$30 - \text{Difference (min 0)} =$

Note: The Supervisors should emphasise each student will be allowed only one go per turn at each number - no corrections