Mathletes Problem of the Week #13

Hiroshi's Coins

	2	**2**	**1**	**5**	**3**	**5**
3	1	2	3	4	5	6
4	7	8	9	10	11	12
3	13	14	15	16	17	18
2	19	20	21	22	23	24
4	25	26	27	28	29	30
2	31	32	33	34	35	36

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In the 6 by 6 grid square shown above, each square contains a different positive integer. Hiroshi placed coins on some squares in the grid. No square had more than one coin. The total number of coins in each row and each column is indicated by the row and column labels written in **bold**.

a) What numbers did Hiroshi place coins on?
b) What is the sum of the numbers on which Hiroshi placed coins?
c) Is there another possible solution? Try to find a different solution or show that one doesn't exist.

Solutions & Explanations: (Try one or try them all! Show your solution and explain your thinking here and on the back!)

Name _____ **Class** _____

(First and last name, please!) **Solutions due: March 28h**