

# Problem A:

## Learning Arithmetic Operations from Gate-Level Circuit

Ranking	Test01				Test02				Test03				Test04				Test05			
	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score
1	Pass	2	97%	1	Pass	2	98%	1	Fail			0	Fail			0	Fail			0
2	Pass	2	97%	1	Pass	2	98%	1	Fail			0	Fail			0	Fail			0
3	Pass	2	97%	1	Fail			0	Fail			0	Fail			0	Fail			0
4	Pass	2	97%	1	Fail			0	Fail			0	Fail			0	Fail			0
5	Pass	2	97%	1	Fail			0	Fail			0	Fail			0	Pass	1446	16%	0
6	Pass	2	97%	1	Fail			0	Fail			0	Fail			0	Fail			0

Ranking	Test06				Test07				Test08				Test09				Test10			
	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score
1	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
2	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
3	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
4	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
5	Pass	3861	27%	0	Fail			0	Fail			0	Pass	6622	17%	0	Pass	2549	16%	0
6	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0

Ranking	Test11				Test12				Test13				Test14				Test15			
	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score
1	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
2	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
3	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
4	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
5	Fail			0	Pass	11178	16%	0	Fail			0	Fail			0	Fail			0
6	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0

Ranking	Test16				Test17				Test18				Test19				Test20			
	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score	output	cost	red_rate	score
1	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
2	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
3	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
4	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
5	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0
6	Fail			0	Fail			0	Fail			0	Fail			0	Fail			0