

1-What is Approximate Computation?

2-Which one do you prefer?

1- A scientific paper 2-A US Patent?

3- What is an approximate HA?

4- These truth tables belong to what?

A	B	C	S
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	1

A

A	B	C	S
0	0	0	1
0	1	1	0
1	0	1	0
1	1	0	1

B

5- These truth tables belong to what?

A	B	C	S
0	0	1	0
0	1	1	1
1	0	1	1
1	1	0	0

A

A	B	C	S
0	0	0	0
0	1	1	1
1	0	1	1
1	1	0	0

B

6-- These truth tables belong to what?

A	B	C	S
0	0	1	1
0	1	0	0
1	0	0	0
1	1	0	1

A

A	B	C	S
0	0	1	1
0	1	0	0
1	0	0	0
1	1	1	1

B

7-- These truth tables belong to what?

A	B	C	S
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	0

A

A	B	C	S
0	0	1	0
0	1	0	1
1	0	0	1
1	1	1	0

B

8- Design an Approximate FA using Majority and Minority gates?

a	b	c	c	s
0	0	0	0	0
0	0	1	0	1
0	1	0	0	1
0	1	1	1	0
1	0	0	0	1
1	0	1	1	0
1	1	0	1	0
1	1	1	1	1

9- Design an Approximate FA⁺ using XOR and XNOR gates.

a	b	c	c	s
0	0	0	1	0
0	0	1	1	1
0	1	0	1	1
0	1	1	0	0
1	0	0	1	1
1	0	1	0	0
1	1	0	0	0
1	1	1	0	1

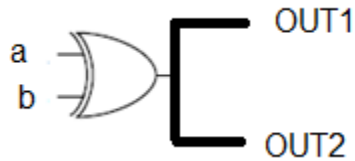
10- Design an Approximate FA⁺ Using Minority gates.

11- Design an Approximate FA⁺ Using just one Majority gate.

12- Design an Approximate FA⁺ Using XOR gates.

13- Design an Approximate FA⁺ Using just one XOR gate

14- Which one do you prefer?



15- Give some example of Approximate computation applications.