HW8: Digital Logic

Due Feb 8 at 11:59pm **Points** 17 **Questions** 5 **Available** until Feb 10 at 11:59pm **Time Limit** None

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	20 minutes	14 out of 17

⚠ Correct answers will be available on Feb 10 at 11:59pm.

Score for this quiz: **14** out of 17
Submitted Feb 3 at 7:05pm
This attempt took 20 minutes.

Question 1

4 / 4 pts

Given the following logic equation:

Y = ~A & B + A & ~B

For a system with:

- Input variables: A,B
- Output variable: Y

Determine if each output column cell is a logic 1 or a logic 0.

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

Answer 1:

0

Answer 2:

1

Answer 3:

1

Answer 4:

0

Partial

Question 2

1 / 4 pts

Given the following logic equation:

$$Y = \sim A \,\&\, \sim B + A \,\&\, \sim B$$

For a system with:

- Input variables: A,B
- Output variable: Y

Determine if each output column cell is a logic 1 or a logic 0.

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

Answer 1:

0

Answer 2:

1

Answer 3:

1

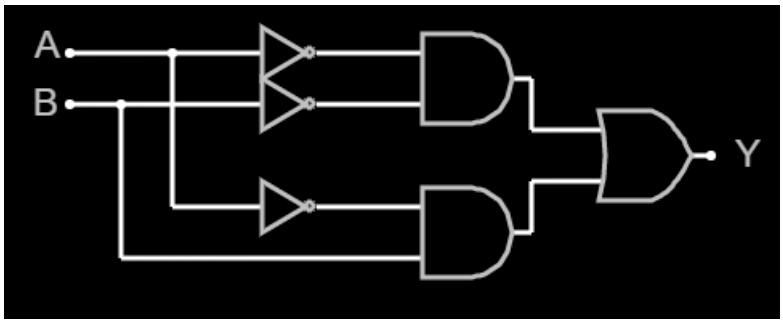
Answer 4:

1

Question 3

3 / 3 pts

Select the logic equation that represents the following circuit:

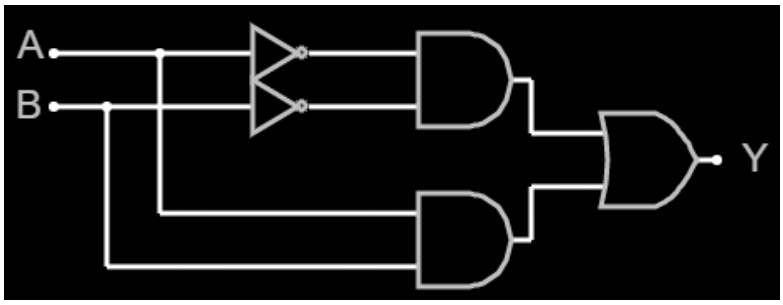


- Y = A & B + A & ~B
- Y = ~A & ~B + ~A & B
- Y = A & B + ~A & B
- Y = ~A & B + A & ~B
- Y = ~A & ~B + A & ~B
- Y = A & B + ~A & ~B
- Y = ~A & B + ~A & ~B
- Y = A & ~B + A & B
- Y = A & ~B + ~A & ~B
- Y = ~A & ~B + A & B
- Y = ~A & B + A & B
- Y = A & ~B + A & ~B

Question 4

3 / 3 pts

Select the logic equation that represents the following circuit:

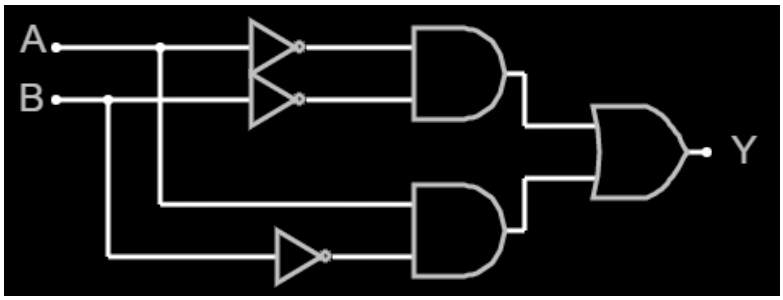


- Y = A & ~B + ~A & ~B
- Y = ~A & B + ~A & ~B
- Y = A & ~B + A & ~B
- Y = A & B + A & ~B
- Y = A & B + ~A & ~B
- Y = A & B + ~A & B
- Y = ~A & B + A & ~B
- Y = ~A & ~B + A & ~B
- Y = ~A & B + A & B
- Y = A & ~B + A & B
- Y = ~A & ~B + ~A & B
- (selected) Y = ~A & ~B + A & B

Question 5

3 / 3 pts

Select the logic equation that represents the following circuit:



- Y = A & ~B + A & ~B
- Y = ~A & B + A & B
- Y = A & ~B + ~A & ~B
- Y = A & B + ~A & B
- Y = ~A & ~B + ~A & B
- Y = ~A & B + ~A & ~B
- Y = A & B + A & ~B
- Y = A & B + ~A & ~B
- Y = ~A & B + A & ~B
- Y = ~A & ~B + A & B
- Y = A & ~B + A & B
- (selected) Y = ~A & ~B + A & ~B

Quiz Score: **14** out of 17