

1. A)

	ABC	Result	Corr. False Case
1	TTT	T	A(5)
2	TTF	T	-
3	TFT	T	A(7)
4	TFF	T	A(8)
5	FTT	F	A(1), C(6)
6	FTF	T	B(8), C(5)
7	FFT	F	A(3)
8	FFF	F	A(4), B(6)

Test pairs:

A: (1, 5) or (3, 7) or (4, 8)

B: (6, 8)

C: (5, 6)

(1, 5, 6, 8) or (4, 5, 6, 8)

B) Unique true point:

	ABC	A	B and not(C)	P = A or (B and not(C))
1	TTT	T	F	T
2	TTF	T	T	T
3	TFT	T	F	T
4	TFF	T	F	T
5	FTT	F	F	F
6	FTF	T	T	T
7	FFT	F	F	F
8	FFF	F	F	F

Test set: {(TTT), (TFT), (TFF), (FTF)}

Near false point:

For clause A:

	ABC	A	B and not(C)	P = A or (B and not(C))
1	TTT	T	F	T
2	TTF	T	T	T
3	TFT	T	F	T
4	TFF	T	F	T
5	TTT	T	F	T
6	FTF	T	T	T
7	TFT	T	F	T
8	TFF	T	F	T

Test set: {(FTT), (FFT), (FFF)}

For clause B:

	ABC	A	B and not(C)	P = A or (B and not(C))
1	TTT	T	F	T
2	TTF	T	T	T
3	TFT	T	F	T
4	TFF	T	F	T
5	FFT	F	F	F
6	FTF	T	T	T
7	FTT	F	F	F
8	FTF	F	T	T

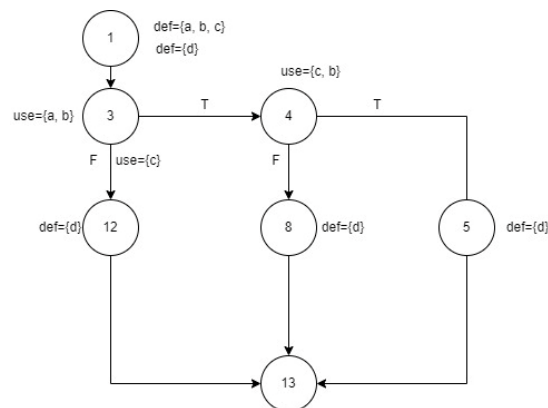
Test set: {(FFF)}

For clause C:

	ABC	A	B and not(C)	P = A or (B and not(C))
1	TTT	T	F	T
2	TTF	T	T	T
3	TFT	T	F	T
4	TFF	T	F	T
5	FTF	F	T	T
6	FTF	T	T	T
7	FFF	F	F	F
8	FFT	F	F	F

Test set: {(FTT)}

2. a)



b) Yes, it is all edges adequate, T1 reaches the right, T2 reaches the middle, and T3 reaches the left.

c)

	A>12 B<45	Result (AND)	Corr. False Case
1	TT	T	A(3), B(2)
2	TF	F	B(1)
3	FT	F	A(1)
4	FF	F	-

Test pairs:

A: (1, 3)

B: (1, 2)

(1, 2, 3)

	C>4 B>0	Result (OR)	Corr. False Case
1	TT	T	-
2	TF	T	C(4)
3	FT	T	B(4)
4	FF	F	C(2), B(3)

Test pairs:

C: (2, 4)

B: (3, 4)

(2, 3, 4)

d) The test suite does is not adequate for the RACC criterion. TC3 evaluates to FF in table 1 which is not in the test pairs. TC1 and TC3 evaluate to TT in the second table and that is not the in the test pairs.

Change TC1 to (a=20, b=0, c=20)

Change TC3 to (a=0, b=0, c=20)

e)

Unique true point:

	A>12	B<45	A>12 AND B<45
1	T	T	T
2	T	F	F
3	F	T	F
4	F	F	F

Test set: {}

	C>4	B>0	C>4 OR B>0
1	T	T	T
2	T	F	T
3	F	T	T
4	F	F	F

Test set: {(TF), (FT)}

Near false point:

For clause A

	A>12	B<45	A>12 AND B<45
1	T	T	T
2	F	F	F
3	T	T	T
4	T	F	F

Test set: {(FT)}

For clause B

	A>12	B<45	A>12 AND B<45
1	T	T	T
2	T	T	T
3	F	F	F
4	F	T	F

Test set: {(TF)}

For clause C

	C>4	B>0	C>4 OR B>0
1	T	T	T
2	T	F	T
3	F	T	T
4	T	F	T

Test set: {(FF)}

For clause B

	C>4	B>0	C>4 OR B>0
1	T	T	T
2	T	F	T
3	F	T	T
4	F	T	T

Test set: {(FF)}

3. A)

	ABC	A && B	B &&!C	!C	Result	Corr. False Case
1	TTT	T	F	F	T	A(5), B(3)
2	TTF	T	T	T	T	-
3	TFT	F	F	F	F	B(1), C(4)
4	TFF	F	F	T	T	C(3)
5	FTT	F	F	F	F	A(1), C(6)
6	FTF	F	T	T	T	C(5)
7	FFT	F	F	F	F	C(8)
8	FFF	F	F	T	T	C(7)

Test pairs:

A: (1, 5)

B: (1, 3)

C: (3, 4) or (5, 6) or (7, 8)

(1, 3, 4, 5)