1. Write the predicate (only the predicate) to represent the requirement:

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"List all computer plasma monitors that either cost more than $800 or
 for which the store has more than 10 items.
 Also list LCD monitors that cost more than $200."
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   - A = "computer plasma monitors that either cost more than $800" (computer plasma monitors that cost > $800)
   - B = "store has more than 10 items" (store has > 10 items)
   - C = "LCD monitors that cost more than $200" (LCD monitors that cost > $200)
   - ((A ∨ B) ∧ C)

2. Answer the following six questions for the predicate:

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p = (a ∧ b) ∨ (c ∧ d)
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$P_a = P_{a=true} \quad P_{a=false}$

$(True \wedge b) \vee (c \wedge d) \oplus (False \wedge b) \vee (c \wedge d)$

$(True \wedge b) \oplus (c \wedge d)$

$b \oplus (c \wedge d)$

$b \wedge \neg(c \wedge d) \Rightarrow b \wedge (\neg c \vee \neg d)$

$P_b = P_{b=true} \quad P_{b=false}$

$(a \wedge True) \vee (c \wedge d) \oplus (a \wedge False) \vee (c \wedge d)$

$(a \wedge True) \oplus (c \wedge d)$

$a \oplus (c \wedge d)$

$a \wedge \neg(c \wedge d) \Rightarrow a \wedge (\neg c \vee \neg d)$

$P_c = P_{c=true} \quad P_{c=false}$

$(a \wedge b) \vee (True \wedge d) \oplus (a \wedge b) \vee (False \wedge d)$

$(True \wedge d) \oplus (a \wedge b)$

$d \oplus (a \wedge b)$

$d \wedge \neg(a \wedge b) \Rightarrow d \wedge (\neg a \vee \neg b)$

$P_d = P_{d=true} \quad P_{d=false}$

$(a \wedge b) \vee (c \wedge True) \oplus (a \wedge b) \vee (c \wedge False)$

$(c \wedge True) \oplus (a \wedge b)$

$c \oplus (a \wedge b)$

$c \wedge \neg(a \wedge b) \Rightarrow c \wedge (\neg a \vee \neg b)$

2.2

	a	b	c	d	(a ∧ b) ∨ (c ∧ d)	P_a	P_b	P_c	P_d
1	T	T	T	T	T	F	F	F	F
2	T	T	T	F	T	T	T	F	F
3	T	T	F	T	T	T	T	F	F
4	T	T	F	F	T	T	T	F	F
5	T	F	T	T	T	F	F	T	T
6	T	F	T	F	F	F	T	F	T
7	T	F	F	T	F	F	T	T	F
8	T	F	F	F	F	F	T	F	F
9	F	T	T	T	T	F	F	T	T
10	F	T	T	F	F	T	F	F	T
11	F	T	F	T	F	T	F	T	F
12	F	T	F	F	F	T	F	F	F
13	F	F	T	T	T	F	F	T	T
14	F	F	T	F	F	F	F	F	T
15	F	F	F	T	F	F	F	T	F
16	F	F	F	F	F	F	F	F	F

2.3 Give a list of pairs of rows from your table that satisfy Clause Coverage (CC) but does not satisfy Predicate Coverage (PC)

{(4,13), (6,11), (7,10)}

2.4 List all pairs of rows from your table that satisfy General Active Clause Coverage (GACC) with respect to each clause

Major clause a: {(2,10), (2,11), (2,12), (3,10), (3,11), (3,12), (4,10), (4,11), (4,12)}

Major clause b:{(2,6), (2,7), (2,8), (3,6), (3,7), (3,8), (4,6), (4,7), (4,8)}
Major clause c: {(5,7), (5,11), (5,15), (9,7), (9,11), (9,15), (13,7), (13,11), (13,15)}
Major clause d:{(5,6), (5,10), (5,14), (9,6), (9,10), (9,14), (13,6), (13,10), (13,14)}

2.5 List all pairs of rows from your table that satisfy Correlated Active Clause Coverage (CACC) with respect to each clause

Major clause a: {(2,10), (2,11), (2,12), (3,10), (3,11), (3,12), (4,10), (4,11), (4,12)}
Major clause b: {(2,6), (2,7), (2,8), (3,6), (3,7), (3,8), (4,6), (4,7), (4,8)}
Major clause c: {(5,7), (5,11), (5,15), (9,7), (9,11), (9,15), (13,7), (13,11), (13,15)}
Major clause d: {(5,6), (5,10), (5,14), (9,6), (9,10), (9,14), (13,6), (13,10), (13,14)}

2.6 List all pairs of rows from your table that satisfy Correlated Active Clause Coverage (RACC) with respect to each clause

Major clause a: {(2,10), (3,11), (4,12)}
Major clause b: {(2,6), (3,7), (4,8)}
Major clause c: {(5,7), (9,11), (13,15)}
Major clause d: {(5,6), (9,10), (13,14)}