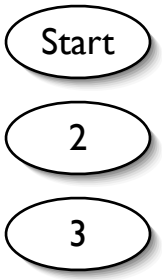
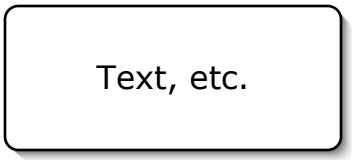
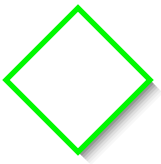
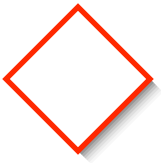
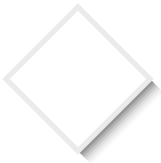
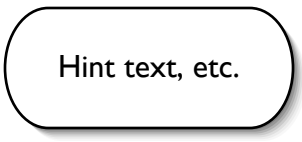
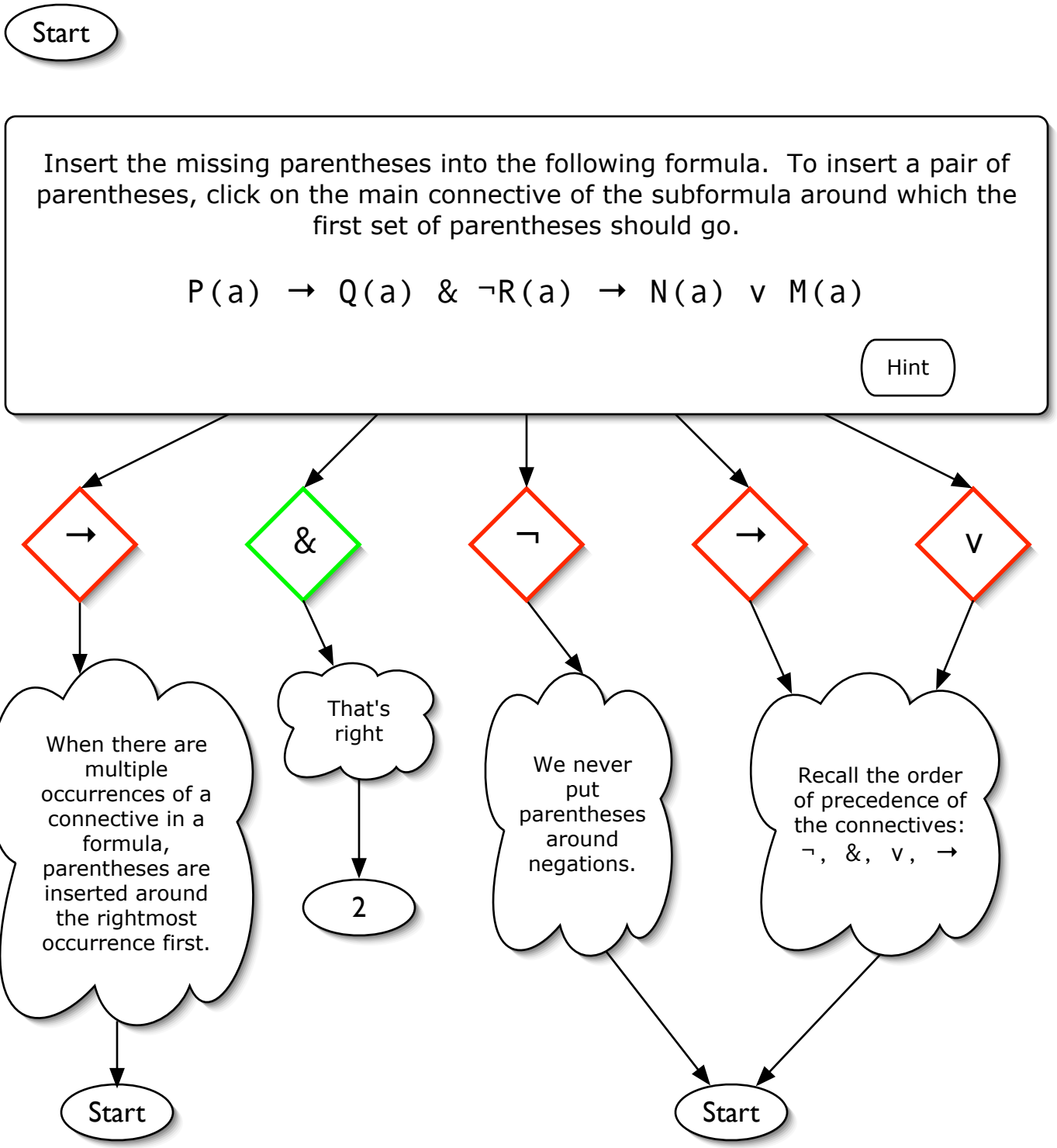
Legend:

State markers:	
User visible content and interface:	
Correct move:	
Incorrect move:	
Disabled move:	
Feedback content:	
Hint content:	

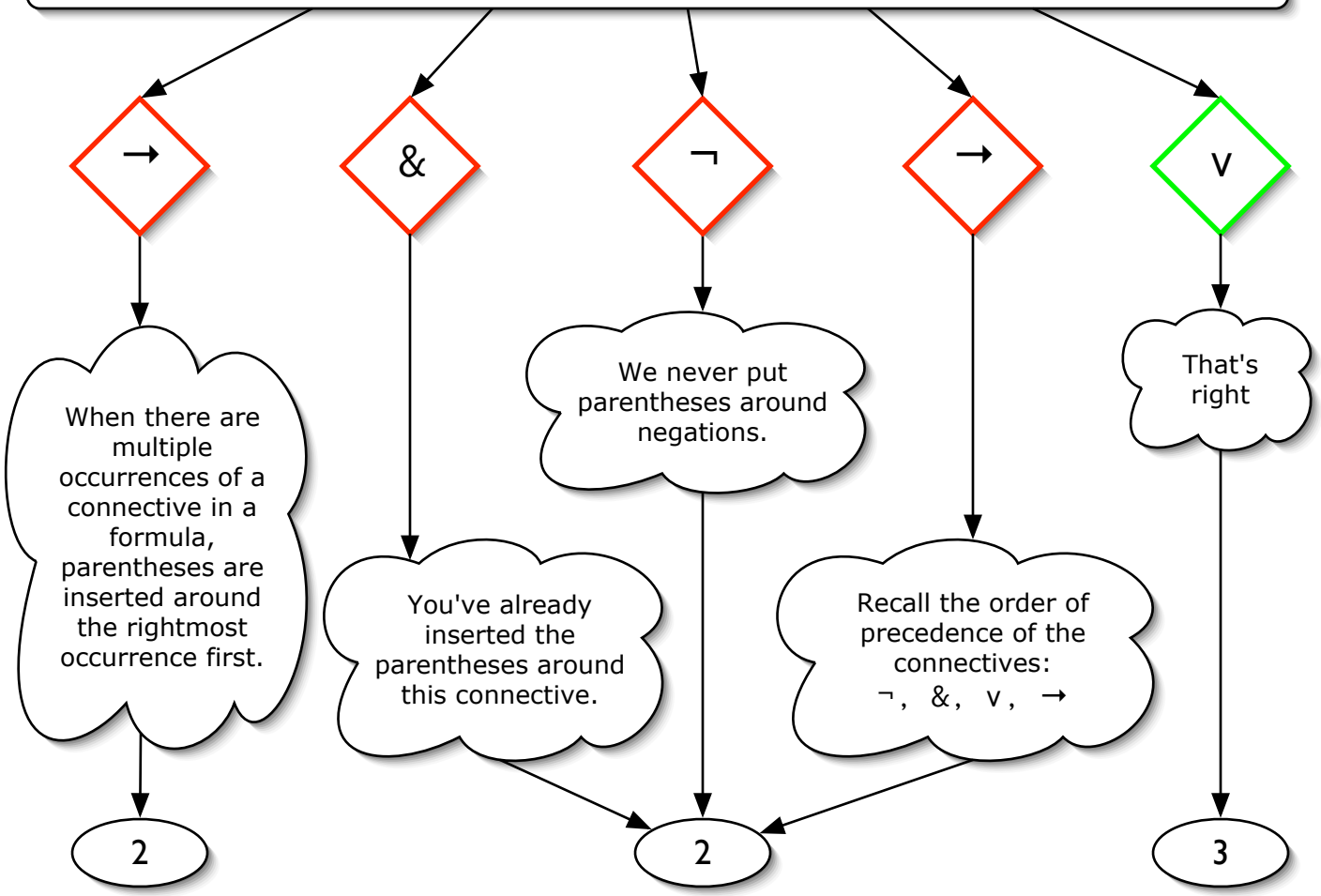

Start
Insert the missing parentheses into the following formula. To insert a pair of parentheses, click on the main connective of the subformula around which the first set of parentheses should go.
P(a) → Q(a) & ¬R(a) → N(a) v M(a)
Hint
→
&
¬
→
v
When there are multiple occurrences of a connective in a formula, parentheses are inserted around the rightmost occurrence first.
That's right
2
We never put parentheses around negations.
Recall the order of precedence of the connectives: ¬, &, v, →
Start
Start

2

Insert the missing parentheses into the following formula. To insert a pair of parentheses, click on the main connective of the subformula around which the first set of parentheses should go.

$$P(a) \rightarrow (Q(a) \ \& \ \neg R(a)) \rightarrow N(a) \vee M(a)$$

Hint

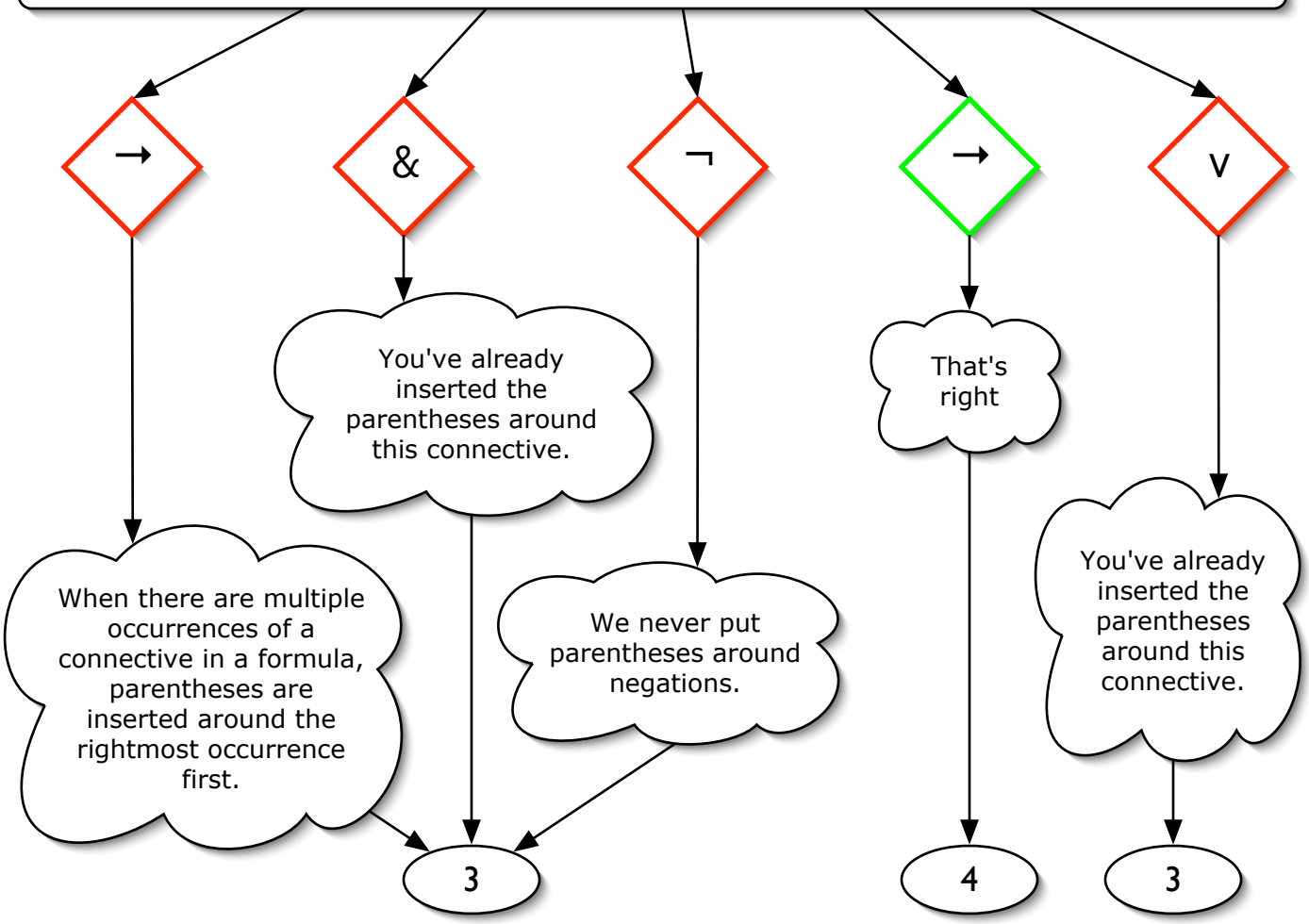


3

Insert the missing parentheses into the following formula. To insert a pair of parentheses, click on the main connective of the subformula around which the first set of parentheses should go.

$$P(a) \rightarrow (Q(a) \ \& \ \neg R(a)) \rightarrow (N(a) \vee M(a))$$

Hint

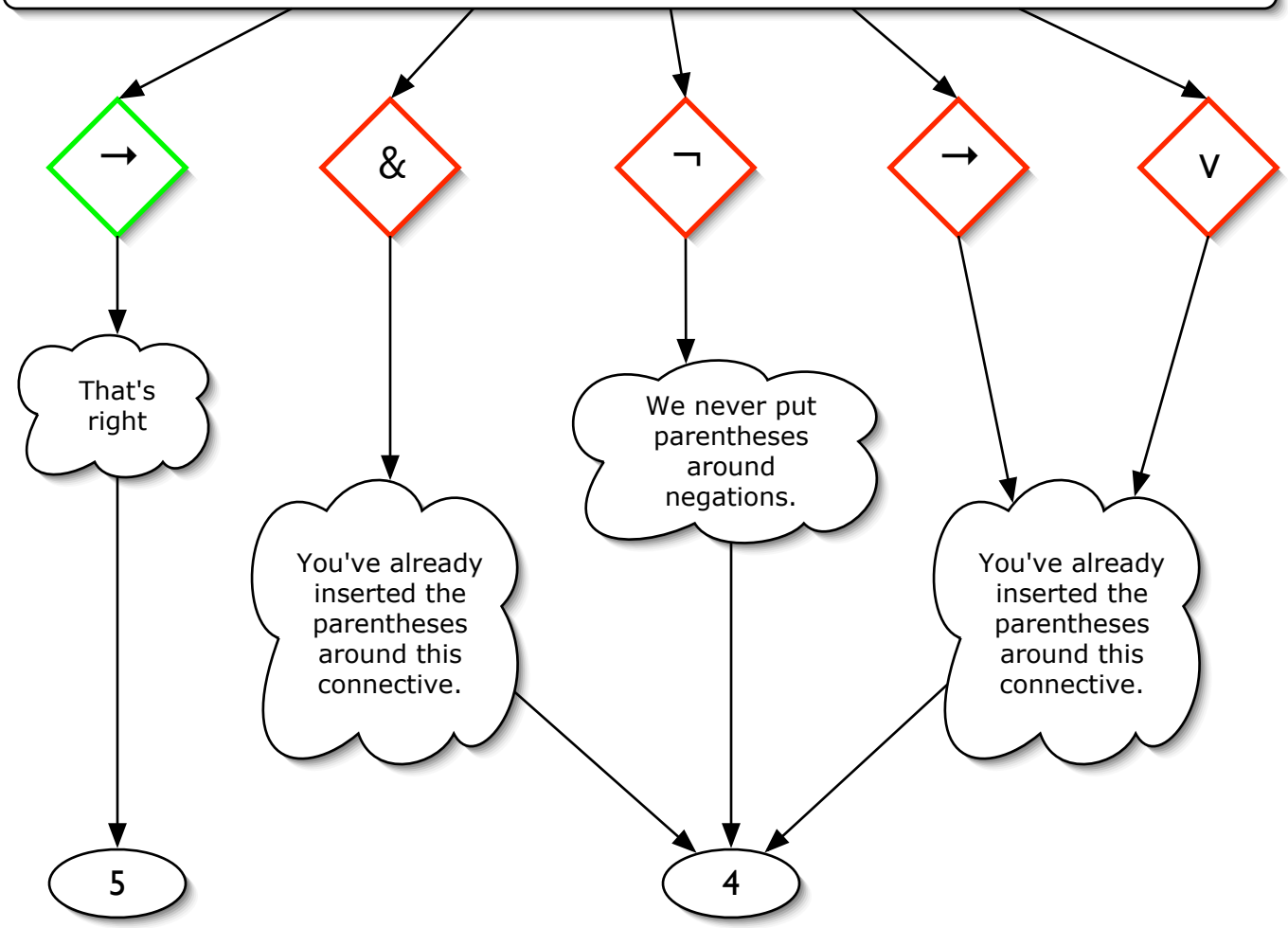


4

Insert the missing parentheses into the following formula. To insert a pair of parentheses, click on the main connective of the subformula around which the first set of parentheses should go.

$$P(a) \rightarrow ((Q(a) \ \& \ \neg R(a)) \rightarrow (N(a) \ v \ M(a)))$$

Hint

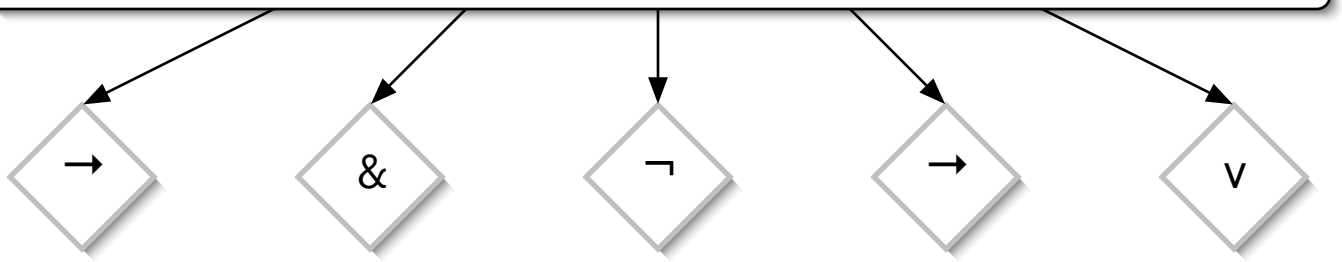


5

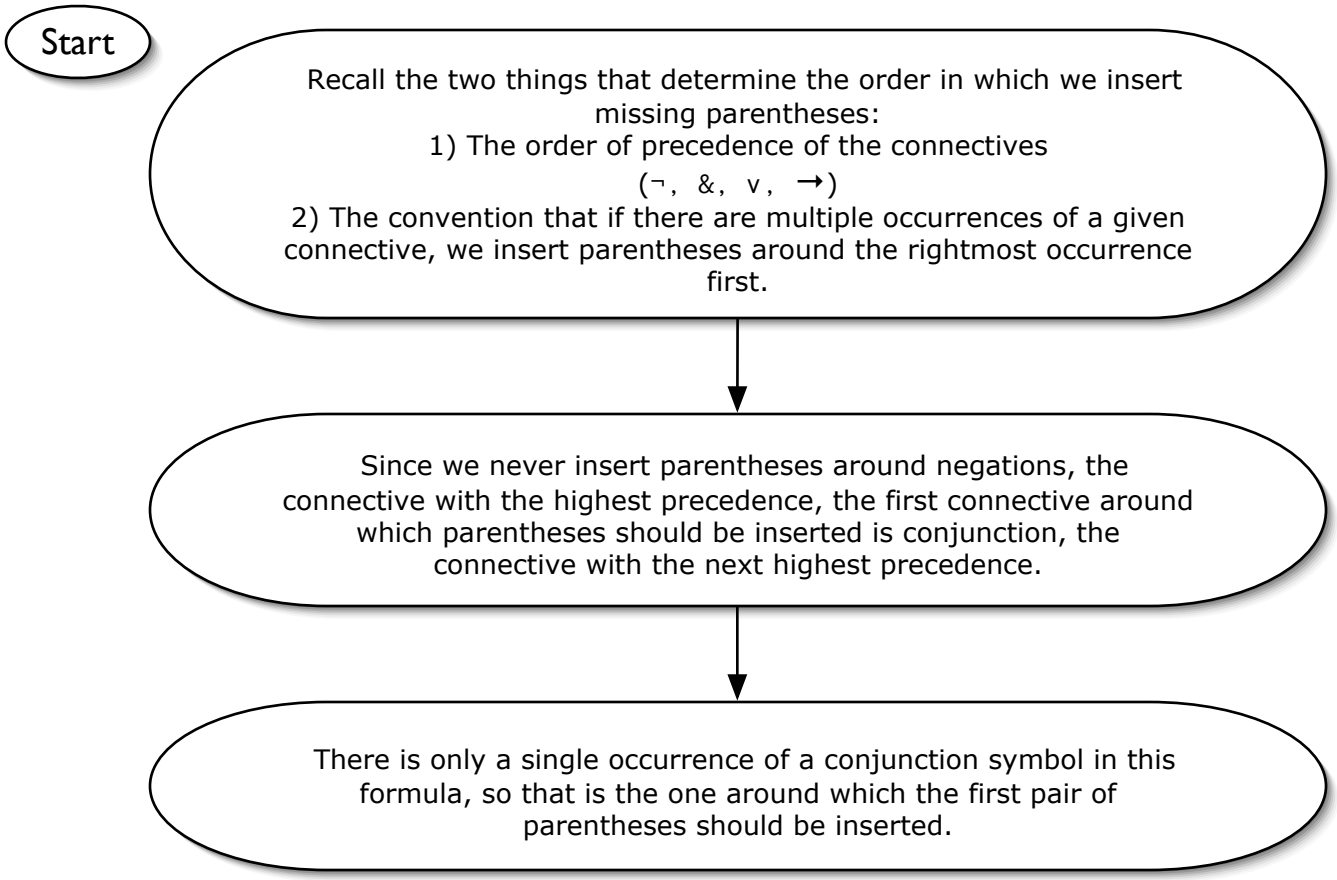
Correct!

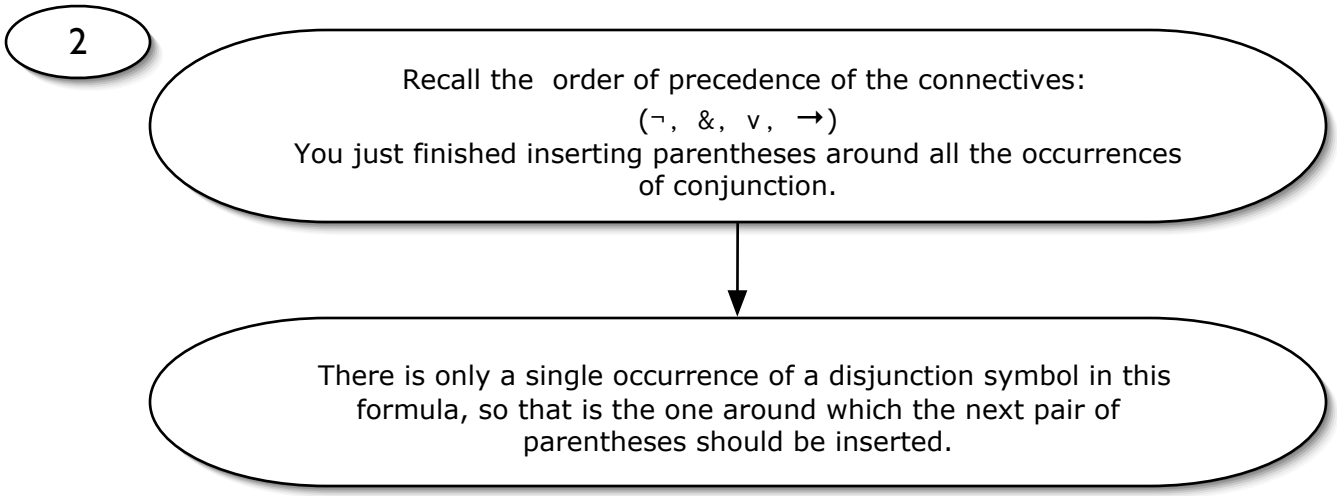
(P(a) → ((Q(a) & ¬R(a)) → (N(a) v M(a))))

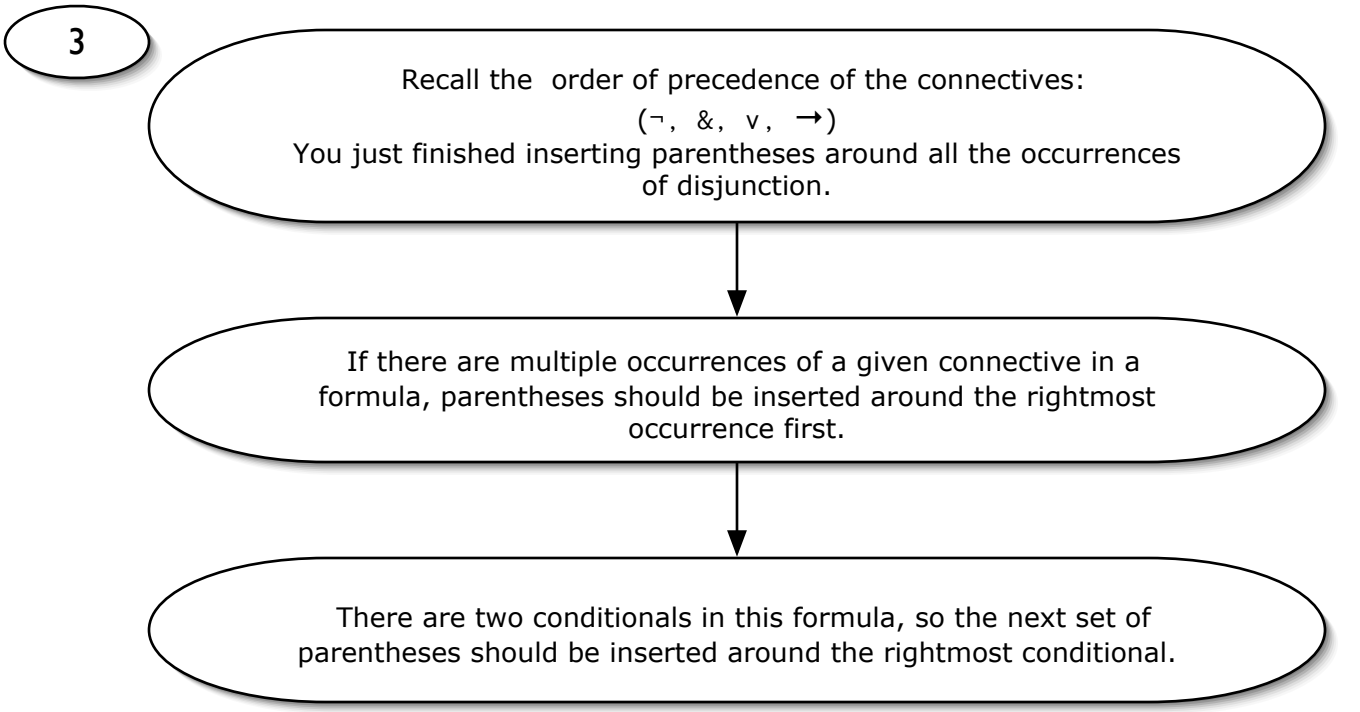
Hint

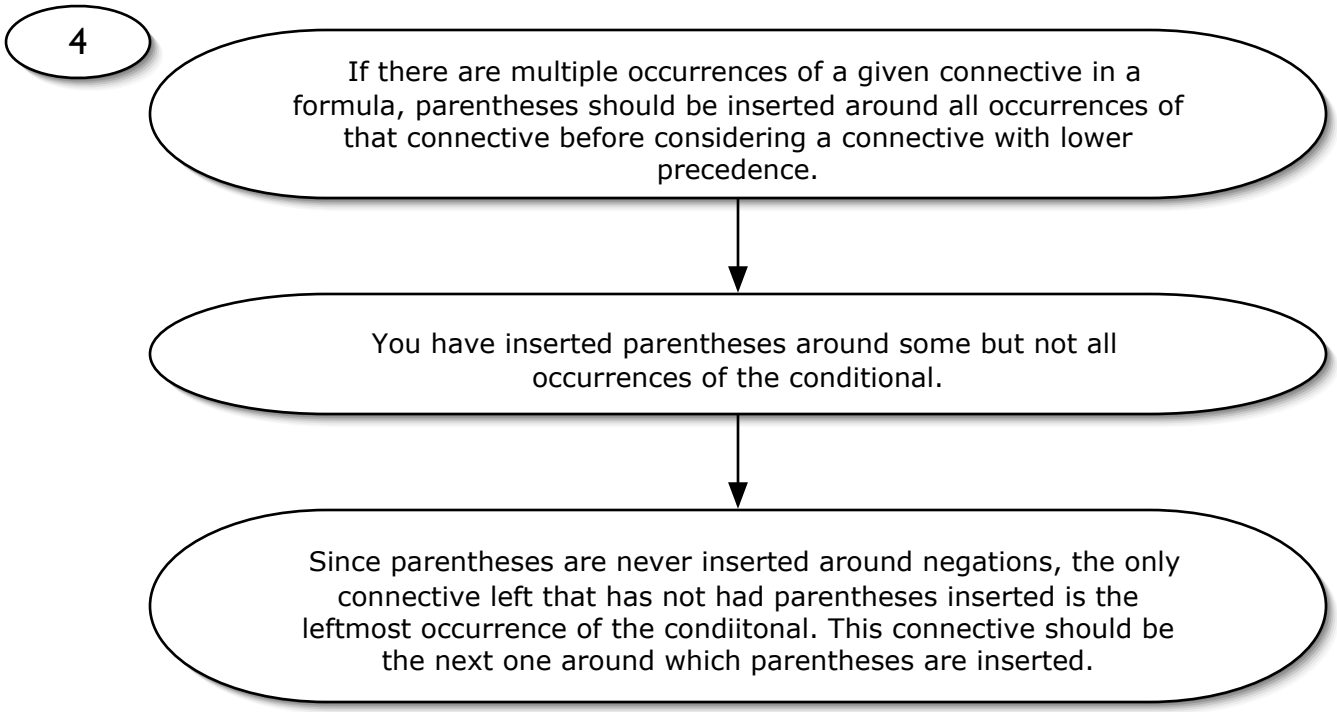


Hint sequences by state:






3
Recall the order of precedence of the connectives:
(¬, &, v, →)
You just finished inserting parentheses around all the occurrences of disjunction.
If there are multiple occurrences of a given connective in a formula, parentheses should be inserted around the rightmost occurrence first.
There are two conditionals in this formula, so the next set of parentheses should be inserted around the rightmost conditional.


4
If there are multiple occurrences of a given connective in a formula, parentheses should be inserted around all occurrences of that connective before considering a connective with lower precedence.
You have inserted parentheses around some but not all occurrences of the conditional.
Since parentheses are never inserted around negations, the only connective left that has not had parentheses inserted is the leftmost occurrence of the condiitonal. This connective should be the next one around which parentheses are inserted.