The correct answers are: line 2: (A∧B)∧C, line 3: A ∧B, annotation in line 2: ∧ elim 1, annotation in line 3: ∧ elim 2

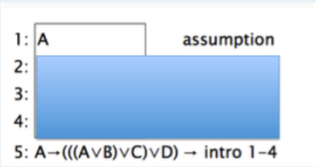
QUESTION 5

Correct Mark 10.00 out of 10.00 Flag question

We consider the problem

A -> (((A∨B)∨C)∨D)

Consider the following box-proof which are partly covered. Select the boxes that apply.



Select one or more:

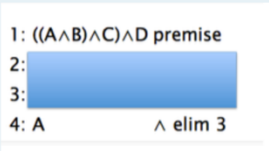
- a. Line 3: (A∨B)∨C ✔
- b. Line 2: A∨B ✔
- c. Annotation in line 3: ∨ intro 2 ✔
- d. Annotation in line 2: B∨A
- e. Line 4: ((A∨B)∨C)∨D ✔
- f. Line 2: (A∨B)∨C
- g. Line 4: (A∨B)∨C
- h. Line 3: ((A∨B)∨C)∨D

Your answer is correct.

QUESTION 4

Correct Mark 10.00 out of 10.00 Flag question

We consider the problem
((A∧B)∧C)∧D |- A
Consider the following box-proof which are partly covered. Select the boxes that apply.



Select one or more:

- a. line 2: D
- b. annotation in line 3: ∧ elim 1
- c. annotation in line 3: ∧ elim 2 ✔
- d. annotation in line 2: ∧ elim 1 ✔
- e. annotation in line 2: ∧ intro 1
- f. line 2: (A∧B)∧C ✔
- g. line 3: A∧C
- h. line 3: A ∧B ✔

Your answer is correct.

The correct answers are: line 2: (A∧B)∧C, line 3: A ∧B, annotation in line 2: ∧ elim 1, annotation in line 3: ∧ elim 2

QUESTION 2 Correct Mark 10.00 out of 10.00 Flag question

Which of the following propositions are tautologies (you might tick more than one box)

Select one or more:

- [ ] a. E
- [ ] b. $(E \rightarrow F) \rightarrow E$
- [x] c. $(\neg E \vee F) \vee (\neg F \vee E)$
- [x] d. $E \vee (E \rightarrow \neg E)$
- [x] e. $E \rightarrow (F \rightarrow E)$
- [ ] f. $\neg(E \wedge F \wedge G)$

The correct answers are: $E \rightarrow (F \rightarrow E)$
, $E \vee (E \rightarrow \neg E)$
, $(\neg E \vee F) \vee (\neg F \vee E)$

QUESTION 3 Correct Mark 10.00 out of 10.00 Flag question

We consider the problem

A∧B, C∧D |- (A∧C)∨E

Consider the following box-proof which are partly covered.
Select the boxes that apply.