

Starting proposition is:

$\neg A \wedge (B \vee C) \vee D \wedge \neg E$

Rules are as follows:

- 1) I calculate the importance of each operator, and at each step I choose the one with the least importance
- 2) Then I split my proposition to the left of the operator, and to the right of the operator
- 3) I repeat step 1, 2 until my current proposition is empty
- 4) When connecting nodes, I always connect them first as left child, then as right child
- 5) When opening a paranthesis I increase the importance with 100

Current proposition is:

$\neg A \wedge (B \vee C) \vee D \wedge \neg E$

The importance of \neg is 3
The importance of \wedge is 2
The importance of \vee is 101
The importance of \vee is 1
The importance of \wedge is 2
The importance of \neg is 3

The least significant operator is /

=> We create node 1) /

Current proposition is:

$\neg A \wedge (B \vee C)$

The importance of \neg is 3
The importance of \wedge is 2
The importance of \vee is 101

The least significant operator is ^

=> We create node 2) ^

We connect 1) / with 2) ^

Current proposition is:

$\neg A$

The importance of \neg is 3

The least significant operator is \neg

=> We create node 3) \neg

We connect 2) ^ with 3) \neg

Current proposition is:

A

The variable is A

We connect 3) \neg with 4) A

Current proposition is:

$(B \vee C)$

The importance of \vee is 101

The least significant operator is /

=> We create node 5) /

We connect 2) ^ with 5) /

Current proposition is:

$(B$

The variable is B

We connect 5) / with 6) B

Current proposition is:

$C)$

The variable is C

We connect 5) / with 7) C

Current proposition is:

$D \wedge \neg E$

The importance of \wedge is 2
The importance of \neg is 3

The least significant operator is ^

=> We create node 8) ^

We connect 1) / with 8) ^

Current proposition is:

D

The variable is D

We connect 8) ^ with 9) D

Current proposition is:

$\neg E$

The importance of \neg is 3

The least significant operator is \neg

=> We create node 10) \neg

We connect 8) ^ with 10) \neg

Current proposition is:

E

The variable is E

We connect 10) \neg with 11) E

Polish notation is:

$\vee \wedge \neg A \vee B C \wedge D \neg E$

Tree representation is:

