

Appendix

Sub implicative ideals of KU-Algebras

S. M. Mostafa, R. A. K Omar, O. W. Abd El- Baseer

Department of Mathematics, Faculty of Education, Ain Shams University, Roxy, Cairo, Egypt.

*Corresponding author's e-mail: samymostafa@yahoo.com

Appendix A: Algorithm for KU-algebras

Input (X : set, $*$: binary operation)

Output (“ X is a KU-algebra or not”)

Begin

If $X = \emptyset$ then go to (1.);

EndIf

If $0 \notin X$ then go to (1.);

End If

Stop: =false;

$i := 1$;

While $i \leq |X|$ and not (Stop) do

If $x_i * x_i \neq 0$ then

Stop: = true;

End If

$j := 1$

While $j \leq |X|$ and not (Stop) do

If $((y_j * x_i) * x_i) \neq 0$ then

Stop: = true;

End If

End If

$k := 1$

While $k \leq |X|$ and not (Stop) do

If $(x_i * y_j) * ((y_j * z_k) * (x_i * z_k)) \neq 0$ then

Stop: = true;

End If

End If While

End If While

End If While

If Stop then

(1.) Output (“ X is not a KU-algebra”)

Else

Output (“ X is a KU-algebra”)

End If

End
