Ishii Scratch

July-28-11
10:52 AM

$a \wedge b = b^{-n} a b^{n}$ $\qquad a^{b^n}$

$(a \wedge b) \wedge c = c^{-n} b^{-n} a b^{n} c^{n}$ $\qquad a^{b^n c^n}$

$(a \wedge c) \wedge (b \wedge c) = (c^{-n} a c^{n}) \wedge (c^{-n} b c^{n}) =$

$a^{c^n (b^{c^n})^n}$

$= c^{-n} b^{-n} c^{n} c^{-n} a c^{n} c^{-n} b^{n} c^{n}$

$= c^{-n} b^{-n} a b^{n} c^{n}$

$(a \wedge b) \wedge c = (a \wedge c) \wedge (b \wedge c) = (a \wedge (b \wedge c)) \wedge (c \wedge (b \wedge c))$

$a^{bc} = a^{c b^{c}}$

Q. In a free quandle, are there any relations between rainbow trees (trees w/ no repeating leafs)?

Q. Is there an interesting notion of "a family of groups"?