

Problem of the Week-2: A Commutative Binary Operation

Let S be a set with an associative multiplication. Suppose that for all $x, y \in S$ we have $x^3 = x$ and $x^2y = yx^2$. Show that this multiplication is commutative.

$$\frac{a}{b+2}$$

Posting Date 9/16/12. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 9/28/12.