Review of
Two Quasi 2-Groups

There are several places where you can improve the techniques of proof. The argument for the existence of 15 elements whose order is a power of 2 in $\mathbb{Z}_5 \rtimes_\phi \mathbb{Z}_4$ is not correct. Consider the element x^2y. You claim that the order of this element is a power of 2. Since $xyx^{-1} = y^{-1}$, we have that $x^2y = yx^2$ and $(x^2y)^4 = x^8y^4 = y^{-1} \neq e$. Hence, $|x^2y|$ does not divide 4. Therefore, x^2y is not a power of 2, since $|\mathbb{Z}_5 \rtimes_\phi \mathbb{Z}_4| = 20$. You do not need to count elements to verify your claim that $P(G) = G$ (see below).

You will find specific comments about the paper below.

NOTE: *A positive number is the line number from the top. A negative number is the line number counted from the bottom.*

Comments

Page	Line Number	Comment
1		
	-7	The number on the definition should be 2.1 (not 1.1). Usually a definition has one statement in it. This seems to be a cross between a definition and a lemma. In the paper you just focus on proving criterion 2. You have not used the other 'definitions' here.
2		
	4-5	Do you mean $\phi(x)(y) = y^{-1}$ where x is a generator of $\mathbb{Z}_4$?
	-6	There are 5 Sylow 2-subgroups, each with 4 elements. Are you claiming that the intersection of any two Sylow 2-subgroups is trivial? How do you know this? This is not true. You can fix your argument (see below).
3		
	1-2	I think this may be the typesetting device you are using. The spacing makes it hard to read. For example: x^2y^2 instead of $x^2\ y^2$.
	4	"In particular ... power of 2" You are basing this off of page 2 line -6.

Comments

Page	Line Number	Comment
	9	To show that $P(G) = G$ you can use the fact that the orders of x and xy are powers of 2. You do not need to use Sylow here.
4		
	2	$[(x_1, y_1), z_1]$ is much easier to read than $[(x_1, y_1)\!, z_1]$.
5		
	4	There are at least 10 elements in the subgroup generated by the elements of order 2. Now use a theorem of Lagrange.