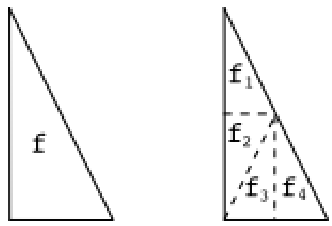
0.1 $\{1\}$-PSO.

In the case $I = \{1\}$. The faces of X are the rhombus made of two flags containing the same vertex in the same face. Subdivide X into flags is to divide each flag of $\mathcal{M}$ into 4 flags, f_1, f_2, f_3 and f_4.



By tracing the action of each r_1 on flags with subscript 2, we can see that $C(X) = \langle s_0,\, s_1,\, s_2 \,|\, s_0^2,\, s_1^2,\, s_2^2,\, (s_0 s_2)^2,\, (s_2 s_1)^4,\, W_1',\, W_2', \ldots,\, W_k' \rangle$, where each W_i' is a word in s_0, s_1, s_2 formed from W_i by the substitutions

1. $r_0 \to s_2$,
2. $r_1 \to s_0 s_1 s_0$,
3. $r_2 \to s_1 s_2 s_1$.

The only sustitution which introduces a odd number of s_0, s_1's is the second one and this can happen only if every W_i has an even number of r_1's. So, $\mathcal{M}$ must be $\{0, 2\}$-colorable.

0.2 $\{0, 1\}$-PSO.

As says in version 8, $\mathcal{M}$ and X are equivalent if $I = \{0, 1\}$.