$\alpha = 3, \quad \beta = 3, \quad \gamma = 1. \qquad \alpha+\beta+\gamma = 2\cdot 3+1 = 7$

$a_3 + b_3 + c_1 = 7-3 = 0+0+4.$

$\Rightarrow \#(\sigma_2 \cdot \sigma_{21} \cdot \sigma_{43})_{G(3,7)} = \#(\sigma_2 \cdot \sigma_{21}\, \sigma_{43-c_1}) = \#(\sigma_2 \cdot \sigma_{21} \cdot \sigma_3)_{G(2,6)}$

$\Rightarrow \alpha = \gamma = 0, \ \beta = 2 \quad \Rightarrow \quad a_0 + b_2 + c_0 \geq 2\cdot 4+1$

$\alpha+\beta+\gamma = 2.$

$\Rightarrow \#(\sigma_2 \cdot \sigma_{21} \cdot \sigma_3)_{G(2,6)} = \#(\sigma_2 \cdot \sigma_{2-1,1-1} \cdot \sigma_3)_{G(2,5)} =$

$\#(\sigma_2 \cdot \sigma_1 \cdot \sigma_3)_{G(2,5)} \Rightarrow \quad \alpha = \beta = 2, \ \gamma = 1. \quad a_2 + b_2 + c_1 = 0$
$+0+3 = 5-2 \quad \Rightarrow \quad \#(\sigma_2 \cdot \sigma_1 \cdot \sigma_3)_{G(2,5)} = \#(\sigma_2 \cdot \sigma_1 \cdot \sigma_0)_{G(1,4)}$

Since $\dim \sigma_0 = 1(4-1)-0 = 3 \ \therefore \ \dim \sigma_2 = 3-2 = 1.$ & $\dim \sigma_1$
$= 3-1 = 2, \quad \#(\sigma_2 \cdot \sigma_1 \cdot \sigma_0)_{G(1,4)} = \#(\sigma_2 \cdot \sigma_1)_{G(1,4)} = \#(\sigma_2 \cdot \sigma_1)_{\mathbb{P}^3}$
$= 1,$ since $\sigma_2 = \mathbb{P}^1. \ \sigma_1 = \mathbb{P}^2.$ //

The two formulas given here will not apply every time, but in low codimension will yield the answer more often than not. They work especially well in case one of the factors $\sigma_a$ is a special Schubert cycle, defined to be one of the form $\sigma_{a,0,0,\ldots}$. In this case, we can use the reductions to obtain the general

Pieri's Formula. If $a = \overset{a}{\overset{\shortparallel}{a_1}}, 0, 0 \cdots$, then for any $b$,

$$(\sigma_a \cdot \sigma_b) = \sum_{\substack{b_i \leq c_i \leq b_{i-1} \\ \sum c_i = a + \sum b_i}} \sigma_c .$$

Proof. We want to show that, for $\sigma_c$ of appropriate