

```
Column@{lhs = {v1, v2, v3} // G1,2 // G1,3,  
Expand[lhs - ({v1, v2, v3} // G1,3 // G1,2] } }
```

$$\begin{aligned} & \{v_1, (1-t_1)v_1 + t_1 v_2, (1-t_1)v_1 + t_1 v_3\} \\ & \{0, 0, 0\} \end{aligned}$$