5.6) $F: \mathbb{P}_2(t) \to \mathbb{P}_2(t)$, donde

$$F(at^2 + bt^2 + c) = (a+1)t^2 + (b-c)t + (a-c)$$

$\bar{u} = a_1t^2 + b_1t^2 + c_1$
$\bar{v} = a_2t^2 + b_2t^2 + c_2$

① $T[\bar{u} + \bar{v}] = T[\bar{u}] + T[\bar{v}]$

$T[(a_1+a_2)t^2 + (b_1+b_2)t^2 + (c_1+c_2)] =$

$T[(a_1+a_2)t^2 + (b_1+b_2)t^2 + (c_1+c_2)] = a_1t^2 + b_1t + c_1 + \ldots$
$a_2t^2 + b_2t + c_2$

$(a_1+a_2)t^2 + (b_1+b_2)t + (c_1+c_2) = (a_1+a_2)t^2 + (b_1+b_2)t + (c_1+c_2)$ ✓

② $T(k\bar{v}) = k\,T(\bar{c})$

$T(ka_1t^2 + kb_1t^2 + kc_1) = k\,T(a_1t^2 + b_1t^2 + c_1)$

$ka_1t^2 + kb_1t + kc_1 = k(a_1t^2 + b_1t + c_1)$
$= ka_1t^2 + kb_1t + kc_1$ ✓

Es una Transformación Lineal