

**Tabelle T.2. Symmetrische Polynome  $\mathcal{S}\{p, q, r\}$ ,  $p \geq q \geq r$  für  $n = 3$  ausgedrückt durch die elementaren symmetrischen Funktionen  $\sigma_1 \equiv a + b + c$ ,  $\sigma_2 \equiv bc + ca + ab$  und  $\sigma_3 \equiv abc$**

<i>Polynome 1. Grades</i>	$\sigma_1$			
$\mathcal{S}\{1, 0, 0\} = 2(a + b + c) \equiv 2\sigma_1$	2			
<i>Polynome 2. Grades</i>	$\sigma_1^2$	$\sigma_2$		
$\mathcal{S}\{2, 0, 0\} = 2(a^2 + b^2 + c^2) \equiv 2s_2$	2	-4		
$\mathcal{S}\{1, 1, 0\} = 2(bc + ca + ab) \equiv 2\sigma_2$	0	2		
<i>Polynome 3. Grades</i>	$\sigma_1^3$	$\sigma_1\sigma_2$	$\sigma_3$	
$\mathcal{S}\{3, 0, 0\} = 2(a^3 + b^3 + c^3) \equiv 2s_3$	2	-6	6	
$\mathcal{S}\{2, 1, 0\} = bc(b + c) + ca(c + a) + ab(a + b)$	0	1	-3	
$\mathcal{S}\{1, 1, 1\} = 6abc \equiv 6\sigma_3$	0	0	6	
<i>Polynome 4. Grades</i>	$\sigma_1^4$	$\sigma_1^2\sigma_2$	$\sigma_1\sigma_3$	$\sigma_2^2$
$\mathcal{S}\{4, 0, 0\} = 2(a^4 + b^4 + c^4) \equiv 2s_4$	2	-8	8	4
$\mathcal{S}\{3, 1, 0\} = bc(b^2 + c^2) + ca(c^2 + a^2) + ab(a^2 + b^2)$	0	1	-1	-2
$\mathcal{S}\{2, 2, 0\} = 2(b^2c^2 + c^2a^2 + a^2b^2)$	0	0	-4	2
$\mathcal{S}\{2, 1, 1\} = 2(a^2bc + b^2ca + c^2ab)$	0	0	2	0