Transitive Groups of Degree 5

No	Group	Order	2-Index	Molien Series
1	"C5 = 5"	5	$1 + t + 2t^2 + 2t^3 + t^4 + t^5$	$1 + t + 3t^2 + 7t^3 + 14t^4 + 26t^5 + 42t^6 + 66t^7 + 99t^8 + 143t^9 + 201t^{10}$
2	"D5 = 5:2"	10	$1 + t + 2t^2 + 2t^3 + t^4 + t^5$	$1 + t + 3t^2 + 5t^3 + 10t^4 + 16t^5 + 26t^6 + 38t^7 + 57t^8 + 79t^9 + 111t^{10}$
3	"F5 = 5:4"	20	$1 + t + t^2 + t^3 + t^4 + t^5$	$1 + t + 2t^2 + 3t^3 + 6t^4 + 9t^5 + 14t^6 + 20t^7 + 30t^8 + 41t^9 + 57t^{10}$
4	"A5"	60	$1 + t + t^2 + t^3 + t^4 + t^5$	$1 + t + 2t^2 + 3t^3 + 5t^4 + 7t^5 + 10t^6 + 13t^7 + 18t^8 + 23t^9 + 31t^{10}$
5	"S5"	120	$1 + t + t^2 + t^3 + t^4 + t^5$	$1 + t + 2t^2 + 3t^3 + 5t^4 + 7t^5 + 10t^6 + 13t^7 + 18t^8 + 23t^9 + 30t^{10}$