

Transitive Groups of Degree 14

| No | Group | Order | 2-Index | Molien Series |
|----|---------------|-------|---|---|
| 1 | "C14=7[x]2" | 14 | $1 + t + 7t^2 + 26t^3 + 73t^4 + 143t^5 + 217t^6 + 246t^7 + 217t^8 + 143t^9 + 73t^{10} + 26t^{11} + 7t^{12} + t^{13} + t^{14}$ | $1 + t + 8t^2 + 40t^3 + 172t^4 + 612t^5 + 1944t^6 + 5538t^7 + 14550t^8 + 35530t^9 + 81752t^{10}$ |
| 2 | "D_1414=[7]2" | 14 | $1 + t + 10t^2 + 26t^3 + 82t^4 + 143t^5 + 232t^6 + 246t^7 + 232t^8 + 143t^9 + 82t^{10} + 26t^{11} + 10t^{12} + t^{13} + t^{14}$ | $1 + t + 11t^2 + 40t^3 + 184t^4 + 612t^5 + 1980t^6 + 5538t^7 + 14640t^8 + 35530t^9 + 81950t^{10}$ |
| 3 | "D7[x]2" | 28 | $1 + t + 7t^2 + 16t^3 + 47t^4 + 79t^5 + 126t^6 + 133t^7 + 126t^8 + 79t^9 + 47t^{10} + 16t^{11} + 7t^{12} + t^{13} + t^{14}$ | $1 + t + 8t^2 + 24t^3 + 104t^4 + 324t^5 + 1032t^6 + 2829t^7 + 7440t^8 + 17930t^9 + 41272t^{10}$ |
| 4 | "2[1/2]F_427" | 42 | $1 + t + 4t^2 + 10t^3 + 30t^4 + 49t^5 + 80t^6 + 86t^7 + 80t^8 + 49t^9 + 30t^{10} + 10t^{11} + 4t^{12} + t^{13} + t^{14}$ | $1 + t + 5t^2 + 16t^3 + 66t^4 + 210t^5 + 672t^6 + 1862t^7 + 4902t^8 + 11876t^9 + 27362t^{10}$ |
| 5 | "F_217[x]2" | 42 | $1 + t + 3t^2 + 10t^3 +$ | $1 + t + 4t^2 + 16t^3$ |

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| | | | $27t^4 + 49t^5 + 75t^6 + 86t^7 + 75t^8 + 49t^9 + 27t^{10} + 10t^{11} + 3t^{12} + t^{13} + t^{14}$ | $+62t^4 + 210t^5 + 660t^6 + 1862t^7 + 4872t^8 + 11876t^9 + 27296t^{10}$ |
| 6 | "[2^3]7" | 56 | $1 + t + 4t^2 + 12t^3 + 28t^4 + 51t^5 + 73t^6 + 84t^7 + 73t^8 + 51t^9 + 28t^{10} + 12t^{11} + 4t^{12} + t^{13} + t^{14}$ | $1 + t + 5t^2 + 20t^3 + 70t^4 + 220t^5 + 634t^6 + 1696t^7 + 4240t^8 + 10010t^9 + 22440t^{10}$ |
| 7 | "F_427[x]2" | 84 | $1 + t + 3t^2 + 6t^3 + 17t^4 + 27t^5 + 44t^6 + 47t^7 + 44t^8 + 27t^9 + 17t^{10} + 6t^{11} + 3t^{12} + t^{13} + t^{14}$ | $1 + t + 4t^2 + 10t^3 + 38t^4 + 112t^5 + 352t^6 + 953t^7 + 2494t^8 + 5996t^9 + 13784t^{10}$ |
| 8 | "[7^2]2=7wr2" | 98 | $1 + t + 4t^2 + 8t^3 + 16t^4 + 23t^5 + 34t^6 + 36t^7 + 34t^8 + 23t^9 + 16t^{10} + 8t^{11} + 4t^{12} + t^{13} + t^{14}$ | $1 + t + 5t^2 + 16t^3 + 52t^4 + 144t^5 + 396t^6 + 1002t^7 + 2460t^8 + 5692t^9 + 12698t^{10}$ |
| 9 | "[2^4]7" | 112 | $1 + t + 4t^2 + 11t^3 + 24t^4 + 41t^5 + 57t^6 + 64t^7 + 57t^8 + 41t^9 + 24t^{10} + 11t^{11} + 4t^{12} + t^{13} + t^{14}$ | $1 + t + 5t^2 + 19t^3 + 63t^4 + 185t^5 + 501t^6 + 1261t^7 + 2993t^8 + 6743t^9 + 14531t^{10}$ |
| 10 | "L_714" | 168 | $1 + t + 2t^2 + 5t^3 + 12t^4 + 17t^5 + 25t^6 + 30t^7 + 25t^8 + 17t^9 + 12t^{10} + 5t^{11} + 2t^{12} + t^{13} + t^{14}$ | $1 + t + 3t^2 + 8t^3 + 25t^4 + 66t^5 + 193t^6 + 508t^7 + 1291t^8 + 3076t^9 + 6997t^{10}$ |

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| 11 | "[2^3]F_217" | 168 | $1 + t + 2t^2 + 6t^3 + 12t^4 + 19t^5 + 27t^6 + 32t^7 + 27t^8 + 19t^9 + 12t^{10} + 6t^{11} + 2t^{12} + t^{13} + t^{14}$ | $1 + t + 3t^2 + 10t^3 + 28t^4 + 80t^5 + 224t^6 + 582t^7 + 1436t^8 + 3372t^9 + 7526t^{10}$ |
| 12 | "1/2[D7^2]2" | 196 | $1 + t + 4t^2 + 7t^3 + 14t^4 + 19t^5 + 26t^6 + 28t^7 + 26t^8 + 19t^9 + 14t^{10} + 7t^{11} + 4t^{12} + t^{13} + t^{14}$ | $1 + t + 5t^2 + 12t^3 + 38t^4 + 90t^5 + 236t^6 + 561t^7 + 1340t^8 + 3011t^9 + 6618t^{10}$ |
| 13 | "[1/2D7^2]2" | 196 | $1 + t + 4t^2 + 7t^3 + 14t^4 + 19t^5 + 27t^6 + 28t^7 + 27t^8 + 19t^9 + 14t^{10} + 7t^{11} + 4t^{12} + t^{13} + t^{14}$ | $1 + t + 5t^2 + 12t^3 + 38t^4 + 90t^5 + 240t^6 + 561t^7 + 1350t^8 + 3011t^9 + 6646t^{10}$ |