

Table S-Coefficients (G, H) of X(\*) in ETC Part 23

X(*)	G(a, b, c)	H(a, b, c)
X(44208)	$(E+2F)^2 - 4S^2$	$-4(E+F)F+4S^2$
X(44209)		
X(44210)	$2E+5F$	$-3E-3F$
X(44211)	$E-10F$	$3E+6F$
X(44212)	$E-5F$	$3E+3F$
X(44213)	$3E+20F$	$-9E-12F$
X(44214)	$E-20F$	$3E+12F$
X(44215)	$(E+F)(E-5F)-5S^2$	$3(E + F)^2 + 3S^2$
X(44216)	$6(E+F)F - S^2$	$- 3S^2$
X(44217)	$5abcSa$+2S^2$	$6S^2$
X(44218)	$E+10F$	$3E-6F$
X(44219)	$(E + F) - 2(3)^{1/2}S$	$3E + 3F$
X(44220)	$(E-4F)Sa$+abc$	$(E+4F)Sa$+abc$
X(44221)	$(E+F)(E-4F)-4S^2$	$(E+F)(E+4F)+4S^2$
X(44222)	$5abcSa$+2S^2$	$-3abcSa$+2S^2$
X(44223)	$3(E + F)-5(3)^{1/2}S$	$3(E + F)+3(3)^{1/2}S$
X(44224)	$5(E + F)^2-3S^2$	$-3(E + F)^2+5S^2$
X(44225)	$4FS^2+abS_A S_B$	$-4FS^2+abS_A S_B$
X(44226)	$-F$	$E-5F$
X(44227)	$-(E+F)F-S^2$	$(E+F)(2E-F)-S^2$
X(44228)	$(E+F)F$	$3(E+F)F- 2S^2$
X(44229)	$abcSa$$	$3abcSa$+4S^2$
X(44230)	$(E+F)^2-S^2$	$3(E+F)^2+S^2$
X(44231)	$(E+F)F-S^2$	$3(E+F)F+S^2$
X(44232)	$E-12F$	$5E+4F$
X(44233)	$E-6F$	$5E+2F$
X(44234)	$E-24F,$	$5E+8F$
X(44235)	$E-8F,$	$5E-8F$
X(44236)	$E+12F,$	$5E-4F$
X(44237)	$7(E+F)^2-5S^2$	$3(E + F)^2+7S^2$
X(44238)	$3SaS_A$+abc$	$-5SaS_A$-abc$
X(44239)	$E+3F$	$-2E-5F$

X(44240)	$E-6F$	$-E+10F$
X(44241)	$E-3F$	$-E+5F$
X(44242)	$E+12F$	$-3E-20F$
X(44243)	$E-3F+ab$	$-E+5F-ab$
X(44244)	$3FS^2+abS_A S_B$	$-5FS^2-abS_A S_B$
X(44245)	11	-17
X(44246)	$E-12F$	$-E+20F$
X(44247)	$E-5F$	$-E+7F$
X(44248)	$4(E+F)F-S^2$	$-6(E+F)F+S^2$
X(44249)	$E+6F$	$-E-10F$
X(44250)	$3(E+F)-4(3)^{1/2}S$	$-3(E+F)+6(3)^{1/2}S$
X(44251)	$2(E+F)^2-S^2$	$-3(E+F)^2+2S^2$
X(44252)	$2(E+F)F-S^2$	$-3(E+F)F+2S^2$
X(44253)	$-8FS^2-6Fabc+abcS_A S$	$2(3E+2F)S^2+(4E+F)abc+abcS_A S$
X(44254)	$28S^2+17abc$	$-20S^2-3abc$
X(44255)	$14S^2+9abc$	$-18S^2-9abc$
X(44256)	$3(E+F)E+S^2+3abc+3Eab$	$2S^2+abc$
X(44257)	$16S^2+9abc$	$9abc$
X(44258)	$-abc$	$16S^2+15abc$
X(44259)	$E^2-4EF-16F^2$	$-E^2+10EF+16F^2$
X(44260)	$E^2-EF-8F^2$	$-E^2+7EF+8F^2$
X(44261)	$5E+14F$	$-9E-18F$
X(44262)	$7E+16F$	$-9E$
X(44263)	$E$	$E+16F$
X(44264)	$-5E-56F$	$31E+40F$
X(44265)	$-E-28F$	$9E+36F$
X(44266)	$-5E-32F$	$27E$
X(44267)	$-3E$	$13E-32F$
X(44268)	$E-7F$	$9F$
X(44269)	$-8F^2$	$E^2+8F^2$
X(44270)	$E-16F$	$9E$
X(44271)	$-E$	$7E-16F$
X(44272)	$-5EF+16F^2$	$2E^2-5EF-16F^2$
X(44273)	$2E-7F$	$9F$

X(44274)	$EF-8F^2$	$2E^2+EF+8F^2$
X(44275)	$E-8F,$	$9E$
X(44276)	$-E$	$7E-8F$
X(44277)	$E+7F$	$-3E-5F$
X(44278)	$3E+16F$	$-9E$
X(44279)	$-1$	$5$
X(44280)	$E-14F$	$18F$
X(44281)	$-EF-16F^2$	$E^2-EF+16F^2$
X(44282)	$E-32F$	$9E$
X(44283)	$-E$	$7E-32F$
X(44284)	$9abc\$a\$+4S^2$	$-9abc\$a\$$
X(44285)	$E+7F$	$-9F$
X(44286)	$-abc\$a\$-2S^2$	$15abc\$a\$+14S^2$
X(44287)	$9abc\$a\$+2S^2$	$9abc\$a\$+18S^2$
X(44288)	$-E$	$7E+16F$
X(44289)	$(E+F)-3(3)^{1/2}S$	$9(E+F)-3(3)^{1/2}S$
X(44290)	$(E-5F)F\$a\$- F\$a\$a\$$	$3(E+F)F\$a\$+2Eabc+(2E+F)\$a\$a\$$ $+2\$a\$b\$c\$$
X(44291)	$(2E-7F)F\$a\$+Fabc -F\$a\$a\$$	$3(E+F)F\$a\$+(3E+F)abc+3E\$a\$a\$$ $+3\$a\$b\$c\$$
X(44292)	$(2E-F)F\$a\$+3Fabc+F\$a\$a\$$	$-(2E+5F)F\$a\$+(E-8F)abc+(E-4F)\$a\$a\$$ $+\$a\$b\$c\$$
X(44293)	$(E-8F)F\$a\$-Fabc-2F\$a\$a\$$	$2(2E+3F)F\$a\$ +3(E+F)abc$ $+3(E+F)\$a\$a\$+3\$a\$b\$c\$$
X(44294)	$(E+4F)F\$a\$+3Fabc+2F\$a\$a\$$	$-6(E+F)F\$a\$-(E+9F)abc-(E+5F)\$a\$a\$$ $-\$a\$b\$c\$$
X(44295)	$[(E+F)(2E-7F)F\$a\$-F\$a\$S^2$ $+(E-8F)Fabc-(E+4F)F\$a\$a\$$ $-2F\$a\$b\$c\$,$	$3(E+F)^2F\$a\$ +(E+4F)\$a\$S^2$ $+(E+F)(3E+5F)abc+abcS^2$ $+2(E+F)(2E+F)\$a\$a\$+F\$a\$a\$^2$ $+4(E+F)\$a\$b\$c\$$-\$a\$a\$^3$
X(44296)	$(E+F)(4E-5F)F\$a\$+F\$a\$S^2$ $+5(E+F)Fabc+9F^2abc$ $+(E+4F)F\$a\$a\$+2F\$a\$b\$c\$,$	$-3(E+F)^2F\$a\$-(E+4F)\$a\$S^2$ $-(E+F)(E+11F)abc-abcS^2$ $-2(E+F)(E+2F)\$a\$a\$ +\$a\$a\$S^2$ $-F\$a\$a\$^2-2(E+F)\$a\$b\$c\$ +\$a\$a\$^3$
X(44297)	$(E+F)(E-8F)F\$a\$+F\$a\$S^2$	$6(E+F)^2F\$a\$ +3(E-F)\$a\$S^2$

	$+(E-8F)Fabc-(E+4F)F\$a\$a\$$ $+F\$a\$a^2\$$	$+(E+F)(3E+5F)abc+abcS^2$ $+(E+F)(2E+3F)\$a\$a\$- \$a\$a\$S^2$ $+(2E-F)\$a\$b\$c\$+(2E-F)\$a\$a^2\$- \$a\$a^3\$$
X(44298)	$(E+F)(E+4F)F\$a\$+F\$a\$S^2$ $+(5E-4F)Fabc+3EF\$a\$a\$+F\$a\$a^2\$$	$-6(E+F)^2F\$a\$+3(E-F)\$a\$S^2$ $-(E+F)(E+7F)abc+abcS^2$ $-(E+F)(2E+5F)\$a\$a\$- \$a\$a\$S^2$ $-(2E+5F)\$a\$b\$c\$$ $+(2E-F)\$a\$a^2\$- \$a\$a^3\$$
X(44309)	$(E-8F)-(E-4F)J$	$-3(E-8F) +(E+4F)J$
X(44310)	$(E-8F) +(E-4F)J$	$-3(E-8F) -(E+4F)J$
X(44328)	$(E+F)(E+2F)F-2FS^2$	$-(E-4F)S^2$
X(44329)	$(E+F)(3E+4F)F - (E+4F)S^2$	$8FS^2$
X(44330)	$(E+F)^2F\$a\$-F\$a\$S^2+(E+F)Fabc$	$-(E-2F)\$a\$S^2-abcS^2$
X(44331)	$(E+F)F^2S^2-FS^4-(E+F)F\$ab\$a\$b\$$	$2FS^4+\$ab\$a\$b\$S^2$
X(44332)	$(J-3)(E+F)F - (J-1)S^2$	$2JS^2$
X(44333)	$(J+3)(E+F)F -(J+1)S^2$	$2JS^2$
X(44334)	$4(E+F)F-S^2$	$-S^2$
X(44335)	$8(E+F)F -3S^2$	$S^2$
X(44336)	$8(E+F)F -4S^2-abc\$a\$$	$4S^2+3abc\$a\$$
X(44337)	$8(E+F)^2F -(3E+4F)S^2$	$(E+F)S^2$
X(44338)	$16(E+F)^2F -(5E+8F)S^2$	$-(E-8F)S^2$
X(44339)	$4(E+F)(E+2F)F -(E+4F)S^2$	$-(E-4F)S^2$
X(44340)	$4(E+F)^2F -(E+2F)S^2$	$-(E-2F)S^2$
X(44341)	$(E+F)(3E+4F)F -(E+2F)S^2$	$6FS^2$
X(44342)	$4(E+F)^2F-(E+2F)S^2$ $+{4(E+F)F-S^2}\$ab\$,$	$-(E-2F)S^2- \$ab\$S^2$
X(44343)	$4(E+F)F\{(E+F)\$ab\$+abc\}$ $-{(E+2F)\$ab\$+abc\}S^2,$	$-{(E-2F)\$ab\$+abc\}S^2$
X(44344)	$4(E+F)F^2S^2-\{4(E+F)F-S^2\}\$ab\$a\$b\$$	$-4FS^4+\$ab\$a\$b\$S^2$
X(44345)	$4(E+F)^3F - (E+F)(E-2F)S^2-S^4$	$-(E+F)(E-2F)S^2$
X(44346)	$12(E+F)F -5S^2$	$3S^2$
X(44347)	$(E+F)(E+9F)-3S^2$	$-3(E+F)^2-S^2$
X(44348)	$2(J-3)(E+F)F +(J-2)S^2$	$JS^2$
X(44349)	$2(J+3)(E+F)F +(J+2)S^2,$	$JS^2$
X(44438)	$F$	$E-5F$

X(44440)	E	-2E+4F
X(44441)	-E+4F	3E
X(44442)	-E	3E+3F
X(44450)	3E-8F	-6E
X(44452)	E-12F	E+4F
X(44454)	3E+2F	-11E-2F
X(44457)	5E+4F	-13E-4F
X(44458)	2E-2F	-3E+6F
X(44459)	$(3)^{1/2}S$	$3(E+F)-3(3)^{1/2}S$
X(44461)	$3(E+F)-(3)^{1/2}S$	$-3(E+F)+3(3)^{1/2}S$
X(44462)	$3(E+4F)-4(3)^{1/2}S$	$-12(E+F)+12(3)^{1/2}S$
X(44463)	$-(3)^{1/2}S$	$3(E+F)+3(3)^{1/2}S$
X(44465)	$3(E+F)+(3)^{1/2}S$	$-3(E+F)-3(3)^{1/2}S$
X(44466)	$3(E+4F)+4(3)^{1/2}S,$	$-12(E+F)-12(3)^{1/2}S$
X(44543)	$(E+F)^2+2S^2$	$3S^2$
X(44575)	$(E+F)(E-8F)+5S^2$	$-6S^2$
X(44576)	$9(E+F)F-2S^2$	$-3S^2$
X(44577)	$(13E+18F)F+2S^2$	$-24S^2$
X(44578)	$9(E+F)F-4S^2,$	$3S^2$
X(44579)	$3(E+F)F-S^2,$	$-2S^2$
X(44580)	41	-27
X(44649)	$24(E+F)^2F-(7E+17F)S^2$	$-3(E-8F)S^2$
X(44650)	$6(E+F)^2F-(E+4F)S^2$	$-3(E-2F)S^2$
X(44651)	$3(E+F)F-5S^2$	$12S^2$
X(44652)	$6(E+F)^3F-(E+F)(E-2F)S^2-4S^4$	$-3(E+F)(E-2F)S^2+6S^4$
X(44653)		
X(44682)	13	-11
X(44802)	E-4F	2E+4F
X(44803)	2F	-5E+2F
X(44804)	4E+3F	36E-24F
X(44860)		
X(44886)	$(E-2F)F-2S^2$	$(E+F)(E+2F)+2S^2$
X(44887)	$5(E+F)F-S^2$	$-(E+F)^2+S^2$
X(44888)	$(2E+5F)F-S^2$	$-(E+F)F+S^2$
X(44889)	$2(7E-2F)F-3S^2$	$-2(E+F)(E-2F)+3S^2$

X(44890)	$(5E+2F)F+2S^2$	$-(E+F)(3E+2F) -2S^2$
X(44891)	$(2E+11F)F-S^2$	$-3(E+F)F+S^2$
X(44892)	$(2E-7F)F - S^2$	$3(E+F)F+ S^2$
X(44893)	$2(E+F)F^2+2FS^2$	$-(E+F)^2F -ES^2$
X(44894)	$2(E^2-F^2)F-(E+2F)S^2$	$2(E+F)^2F+(E+2F)S^2$
X(44895)	$(E+F)(5E-4F)F-(E+4F)S^2$	$-(E+F)^2(E-4F)+(E+4F)S^2$
X(44896)	$(E+F)(3E-2F)F-2FS^2,$	$-(E+F)^2(E-2F)+2FS^2$
X(44899)	$E-24F$	$E+8F$
X(44903)	$17$	$- 39$
X(44905)	$4(E-4F)F$	$(E+4F)(E-12F)$
X(44906)	$4(E-6F)S^2+(E-5F)abc$a$$	$-4(E-2F)S^2 -(E+F)abc$a$$
X(44920)	$E-F$	$E-5F$
X(44936)		
X(44999)	$13F$	$-10E+13F$