

開始日 /	終了日 /	解説 NO 12	多項式の計算 NO6		NAME	18
			中 3	乗法公式応用難問-①		

Aコース

$$\begin{aligned}
 \textcircled{1} & (x+y-4)(x+y+6) \\
 &= (A-4)(A+6) \\
 &= A^2-2A-24 \\
 &= (x+y)^2-2(x+y)-24 \\
 &= x^2+2xy+y^2-2x-2y-24 \\
 \\
 \textcircled{2} & (x-y+5)(x-y-8) \\
 &= (A+5)(A-8) \\
 &= A^2-3A-40 \\
 &= (x-y)^2-3(x-y)-40 \\
 &= x^2-2xy+y^2-3x+3y-40 \\
 \\
 \textcircled{3} & (x+y-1)(x+y-7) \\
 &= (A-1)(A-7) \\
 &= A^2-8A+7 \\
 &= (x+y)^2-8(x+y)+7 \\
 &= x^2+2xy+y^2-8x-8y+7 \\
 \\
 \textcircled{4} & (x-y+3)(x-y-9) \\
 &= (A+3)(A-9) \\
 &= A^2-6A-27 \\
 &= (x-y)^2-6(x-y)-27 \\
 &= x^2-2xy+y^2-6x+6y-27 \\
 \\
 \textcircled{5} & (2x-y+2)(2x-y+10) \\
 &= (A+2)(A+10) \\
 &= A^2+12A+20 \\
 &= (2x-y)^2+12(2x-y)+20 \\
 &= 4x^2-4xy+y^2+24x-12y+20 \\
 \\
 \textcircled{6} & (3x+2y-5)(3x+2y+1) \\
 &= (A-5)(A+1) \\
 &= A^2-4A-5 \\
 &= (3x+2y)^2-4(3x+2y)-5 \\
 &= 9x^2+12xy+4y^2-12x-8y-5
 \end{aligned}$$

Bコース

$$\begin{aligned}
 \textcircled{1} & (x+y+7)(x+y-7) \\
 &= (A+7)(A-7) \\
 &= A^2-49 \\
 &= (x+y)^2-49 \\
 &= x^2+2xy+y^2-49 \\
 \\
 \textcircled{2} & (x-y-12)(x-y+12) \\
 &= (A-12)(A+12) \\
 &= A^2-144 \\
 &= (x-y)^2-144 \\
 &= x^2-2xy+y^2-144 \\
 \\
 \textcircled{3} & (3x-2y-1)(3x-2y+1) \\
 &= (A-1)(A+1) \\
 &= A^2-1 \\
 &= (3x-2y)^2-1 \\
 &= 9x^2-12xy+4y^2-1 \\
 \\
 \textcircled{4} & (2x-5y+3)(2x-5y-3) \\
 &= (A+3)(A-3) \\
 &= A^2-9 \\
 &= (2x-5y)^2-9 \\
 &= 4x^2-20xy+25y^2-9 \\
 \\
 \textcircled{5} & (5x+4y-8)(5x+4y+8) \\
 &= (A-8)(A+8) \\
 &= A^2-64 \\
 &= (5x+4y)^2-64 \\
 &= 25x^2+40xy+16y^2-64 \\
 \\
 \textcircled{6} & (x-9y-6)(x-9y+6) \\
 &= (A-6)(A+6) \\
 &= A^2-36 \\
 &= (x-9y)^2-36 \\
 &= x^2-18xy+81y^2-36
 \end{aligned}$$