FACTORING

*1. GCF
2. GROUPING
3. P-S-D
4. KEY #
5. DIFF OF 2 SQUARES
"2 TERMS WITH A MINUS BETWEEN THEM"
6. DIFF OF 2 CUBES
"2 TERMS WITH A MINUS BETWEEN THEM"
7. SUM OF 2 CUBES
"2 TERMS WITH A PLUS BETWEEN THEM"

① $m^2+14m+49$

$(m+7)(m+7)$

$(m+7)^2$

49

P	S	D
1.49	50	49
7.7	(14)	0

② $49m^2-9n^2$

$(7m)^2-(3n)^2$ (F, L)

DOTS $(F+L)(F-L)$

$(7m+3n)(7m-3n)$

③ $45^{10}-25t^8$

$(25^5)^2-(5t^4)^2$

$(25^5+5t^4)(25^5-5t^4)$

④ x^4-81

$(x^2)^2-(9)^2$

$(x^2+9)(x^2-9)$

$(x^2+9)[(x)^2-(3)^2]$

$(x^2+9)(x+3)(x-3)$

⑤ $27v^3+8$

SUM OF 2 CUBES

$(3v)^3+(2)^3$ (F, L)

$(F+L)(F^2-FL+L^2)$

$(3v+2)((3v)^2-(3v)(2)+(2)^2)$

$(3v+2)(9v^2-6v+4)$

⑥ $27x^3-64y^3$

DIFF OF 2 CUBES

$(3x)^3-(4y)^3$ (F, L)

$(F-L)(F^2+FL+L^2)$

$(3x-4y)((3x)^2+(3x)(4y)+(4y)^2)$

$(3x-4y)(9x^2+12xy+16y^2)$

⑦ $48x^3+3y^6$

$3(16x^3+y^6)$