

⑦ $(7x-1)^2 - 10(7x-1) + 16$

① $u^2 - 10u + 16$ PSD

② $(u-2)(u-8)$

③ $(7x-1-2)(7x-1-8)$
 $(7x-3)(7x-9)$

⑧ $\frac{w^6}{w^2} - 29\frac{w^3}{w} + 54$

1. $u^2 - 29u + 54$ (PSD)

2. $(u-2)(u-27)$

3. $(w^3-2)(w^3-27)$

DIFF OF 2 CUBES

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

⑧ $-3y^3 - 9y^2 + 12y + 36$

$-3(y^3 + 3y^2 - 4y - 12)$

GCF

Grouping

$-3[y^2(y+3) - 4(y+3)]$

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

DOTS

$-3(y+3)(y+2)(y-2)$

⑨ $75x^5 + 363x^3 - 60x$

$ac = 25(20)$

$= 500$

$3x(25x^4 + 121x^2 - 20)$

$\frac{p}{q} \leq r$

$3x(25u^2 + 121u - 20)$

1.500

$3x(25u^2 + 125u - 4u - 20)$

2.250

$3x[25u(u+5) - 4(u+5)]$

4.125

(121)

$3x(u+5)(25u-4)$

5.100

$3x(x^2+5)(25x^2-4)$

(DOTS)

$3x(x^2+5)(5x+2)(5x-2)$