

FACTOR

$$\textcircled{1} \quad 7x^3 + 35x^2 - 5x - 25$$

$$7x^2(x+5) - 5(x+5)$$

$$(x+5)(7x^2-5)$$

$$\textcircled{2} \quad 6r^3 + 30r^2 + 2r + 10$$

$$2(3r^3 + 15r^2 + r + 5)$$

$$2[3r^2(r+5) + 1(r+5)]$$

$$2(r+5)(3r^2+1)$$

Leading Coeff. $\neq 1$

$$6x^2 - 5x - 4$$

\rightarrow $24x^2$

$$\underline{3x} \quad \underline{-8x}$$

Add to $-5x$

$$6x^2 + 3x - 8x - 4$$

$$3x(2x+1) - 4(2x+1)$$

$$(2x+1)(3x-4)$$

Ex. $5x^2 - 11x + 6$

$30x^2$

$-5x$ $-6x$

$$\underbrace{5x^2 - 5x} \quad \underbrace{-6x + 6}$$

$$5x(x-1) - 6(x-1)$$

$$(x-1)(5x-6)$$

$$7x^2 - 33x - 10$$

no gcf $LC=7$

$$-70x^2$$

10, 7
②, ⑤, 1

$$\underline{-35x} \uparrow \underline{2x} \rightarrow -33x$$

$$7x^2 - 35x + 2x - 10$$

$$7x(x-5) + 2(x-5)$$

$$(x-5)(7x+2)$$