

Factoring Reminders (preview to ch. 3)

1. G.C.F.

$$\textcircled{1} \frac{3x^2}{3x^2} - \frac{6x^5}{3x^2}$$

$$\begin{array}{ll} 3, 6 & \text{GCF} = 3 \\ x^2, x^5 & \text{GCF} = x^2 \end{array} \quad \text{lowest exponent}$$

$$= 3x^2(1 - 2x^3)$$

$$\textcircled{2} \frac{4xy}{4xy} + \frac{8x^2y^3}{4xy} - \frac{12xy^2}{4xy}$$

$$= 4xy(1 + 2xy^2 - 3y)$$

2. trinomials $\rightarrow x^2 + bx + c$

ex. 1 $x^2 + 8x + 7$

$$\begin{array}{l} \textcircled{+} 8 \quad \textcircled{\times} 7 \rightarrow \begin{array}{l} 1, 7 \\ -1, -7 \end{array} \end{array}$$

$$= (x + 1)(x + 7)$$

2. $x^2 - 15x + 26$

$$\begin{array}{l} \textcircled{+} -15 \\ \textcircled{\times} 26 \rightarrow \begin{array}{l} 1, 26 \\ 2, 13 \end{array} \end{array}$$

$$\begin{array}{l} \textcircled{+} -15 \\ \textcircled{\times} 26 \rightarrow \begin{array}{l} 1, 26 \\ 2, 13 \end{array} \end{array}$$

$$= (t - 2)(t - 13)$$

$$(\times) \quad 26 \cdot 2, 13 \cdot \underline{\underline{-2, -13}}$$

A → GCF - all

B - Trinomials - left side minimum