

1/22/13 Factoring trinomials w/ 2 variables

Factor

Ex ① $6x^2 - 7xy - 3y^2$

$$\begin{array}{r} -18 \\ \hline 3 \div -9y \\ 3 \div 6x \\ \hline -3y \\ 2x \end{array} \quad \begin{array}{r} 2y^2 \\ \hline 6x \div 2 \\ \hline 1y \\ 3x \end{array}$$

$$\boxed{(2x-3y)(3x+y)}$$

② $18x^2 + 15xy + 2y^2$

$$\begin{array}{r} 36 \\ \hline 3 \div 3y \\ 5 \div 18x \\ \hline 1y \\ 6x \end{array} \quad \begin{array}{r} 12y \div 6 \\ \hline 14x \div 6 \\ \hline 2y \\ 3x \end{array}$$

$$\boxed{(6x+y)(3x+2y)}$$

③ $4x^2 - 5xy - 6y^2$

$$\begin{array}{r} -24 \\ \hline 4 \div -8y \\ 4 \div 4x \\ \hline -2y \\ x \end{array} \quad \begin{array}{r} 3y \\ \hline 4x \\ \hline 3y \\ 4x \end{array}$$

$$\boxed{(x-2y)(4x+3y)}$$