

11/13/12 Factoring Using Super X!

Factor

Example

① $2x^2 + 3x - 20$

$$\begin{array}{r} -40 \\ \frac{-5}{2x} \quad \frac{8 \div 2}{2x \div 2} \quad \frac{4}{x} \\ \hline (2x-5)(x+4) \end{array}$$

② $6x^2 + 13x - 5$

$$\begin{array}{r} -30 \\ \frac{-1}{3x} \quad \frac{-2 \div 2}{6x \div 2} \quad \frac{15 \div 3}{6x \div 3} \quad \frac{5}{2x} \\ \hline (3x-1)(2x+5) \end{array}$$

③ $2x^2 - 1xy - 3y^2$

$$\begin{array}{r} -6 \\ \frac{-3y}{2x} \quad \frac{2y}{2x} \quad \frac{1}{x} \\ \hline (2x-3y)(x+y) \end{array}$$

④ $2x^2 - 11x - 21$

$$\begin{array}{r} -42 \\ \frac{3}{2x} \quad \frac{-14 \div 2}{2x \div 2} \quad \frac{-7}{x} \\ \hline (2x+3)(x-7) \end{array}$$

⑤ $x^2 - 5xy + 6y^2$

$$\begin{array}{r} 6 \\ \frac{-3y}{x} \quad \frac{-2y}{x} \\ \hline (x-3y)(x-2y) \end{array}$$

⑥ $x^2 - 10xy - 11y^2$

$$\begin{array}{r} -11 \\ \frac{-11y}{x} \quad \frac{1y}{x} \\ \hline (x-11y)(x+y) \end{array}$$