

$$ax^2 + bx + c$$

3 Terms

4 Terms

Trinomials	Perfect Square Trinomials	Factor by Grouping
<p>Rule: Use X method or Box Method or Guess & check. Always ^{check} for GCF first.</p>	<p>Rule(s):</p>	<p>Rule:</p>
<p>Examples:</p> <p>Ex.1 $y^2 - 11y + 18$ $a=1$ $b=-11$ $c=18$</p> <p>$\begin{matrix} 18 & & -9 \\ -2 & \times & -9 \\ 1 & & 1 \end{matrix}$ $\begin{matrix} 1 \cdot 18 \\ 2 \cdot 9 \\ 3 \cdot 6 \end{matrix}$</p> <p>(y-2)(y-9)</p> <p>Ex.2 $4x^2 - 13x - 35$ $a=4$ $b=-13$ $c=-35$</p> <p>$\begin{matrix} -140 & & -70 \\ 7 & \times & -52 \\ 4 & & 1 \end{matrix}$ $\begin{matrix} 1 \cdot -140 \\ -20 \cdot -52 \\ 1 \cdot 4 \cdot -35 \\ 5 \cdot -28 \\ 7 \cdot -20 \\ 10 \cdot -14 \end{matrix}$</p> <p>(4x+7)(x-5)</p> <p>Ex.3 $12x^2 + 13x + 3$ $a=12$ $b=13$ $c=3$</p> <p>$\left(\frac{1}{3}\right) = \frac{4}{12} \times \frac{9}{13} = \left(\frac{3}{4}\right)$ $\begin{matrix} 1 \cdot 36 \\ 2 \cdot 18 \\ 3 \cdot 12 \\ 4 \cdot 9 \\ 6 \cdot 6 \end{matrix}$</p> <p>(3x+1)(4x+3)</p>	<p>Examples:</p>	<p>Examples:</p>