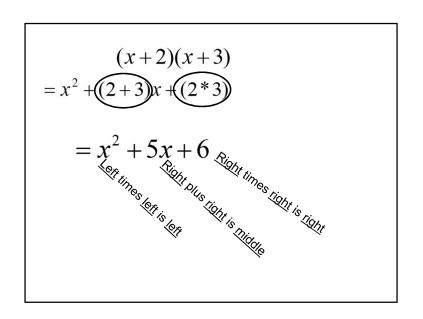
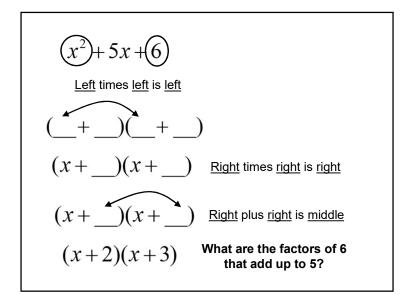
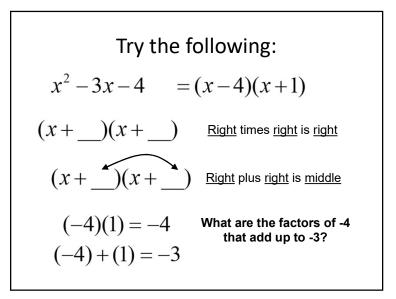


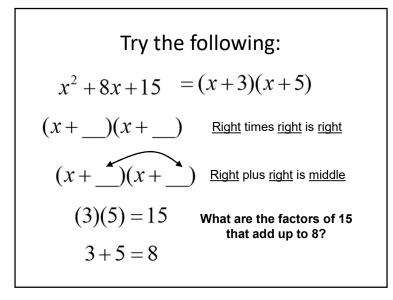
$$(x+2)(x+3) \xrightarrow{\text{multiply}} x^2 \xrightarrow{\text{"left times left is the left term"}} (x+2)(x+3) \xrightarrow{\text{"right times right is the right term"}} x^2 + 6 (x+2)(x+3) \xrightarrow{\text{"inner"}} x^2 + 2x + 6 (x+2)(x+3) \xrightarrow{\text{"outer"}} x^2 + 2x + 6 (x+2)(x+3) \xrightarrow{\text{"outer"}} x^2 + 2x + 3x + 6 = x^2 + (2+3)x + (2*3)$$



$$\begin{array}{rcl}
(x+4)(x+5) &= x^2 + (__)x + (__) \\
&= ___ \\
(x-6)(x+1) &= x^2 + (__)x + (__) \\
&= __ \\
\end{array}$$



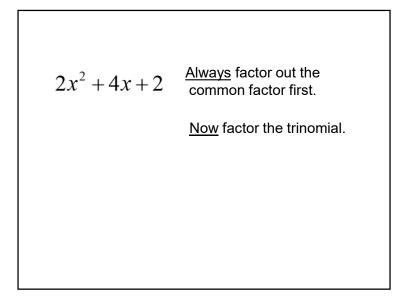


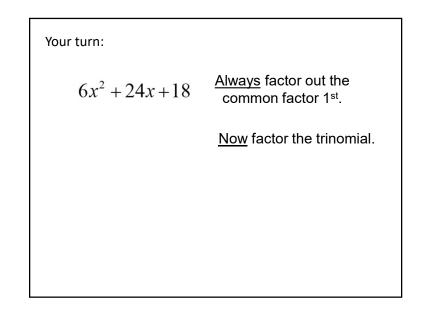


Try the following:

$$x^{2} + 10x + 21$$

 $x^{2} - 6x - 16$
 $x^{2} - 9x + 18$





 $x^2 - 1$ "the difference of two squares" Two numbers multiplied = (-1) and added = 0 Vocabulary <u>Conjugate pair</u> (of binomials) two binomials whose terms are exactly the same <u>except</u> +/- for one pair of terms (x-1)(x+1)(-x+1)(x+1)