

# Factoring: When Do I Do What?

Common  
Numbers  
and/or  
Letters

$x^2$  and  
Three Terms

$x^2$ , minus, and  
Two Perfect  
Squares

When  
all else  
fails!

Reverse  
FOIL

D.O.S  
(Difference of Squares)

Quad-  
ratic  
Formula

GCF

Ex:  $5x + 10$   
 $v^2 + 4v$   
 $5x^2y^3 - 15x^3y$

Ex:  $x^2 + 6x + 8$   
 $x^2 - 8x - 20$   
 $x^2 - 5x - 36$

Ex:  $x^2 - 25$   
 $x^2 - 100y^2$   
 $16x^2 - 81y^4$

Ex:  $2x^2 - 3x + 17$   
 $5x^2 - x + 23$   
 $-3x^2 + 38$

