

Factoring Per #2

KEY

* What are the four types of factoring we have learned so far?

GCF	$a = 1$	D.O.S.	$a > 1$
- Common # and/or variable in all terms $3x^2 + 12x \rightarrow 3x(x+4)$	3 terms x^2 or $1x^2$ term "X-games" $x^2 + 3x + 2 \rightarrow (x+2)(x+1)$	2 perfect square terms "-" sign between $4x^2 - 9 \rightarrow (2x+3)(2x-3)$	- Coefficient attached to x^2 term is greater than 1 - check if GCF first $3x^2 + 7x + 2 \rightarrow (3x+1)(x+2)$

State the type of factoring, then factor

① $2x^2 - 6xy$
GCF

$2x(x-3y)$

② $x^2 + x - 6$
 $a = 1$

$(x+3)(x-2)$

③ $2x^2 + 13x + 21$
 $a > 1$

$(x+3)(2x+7)$

④ $16x^2 - 9y^2$
D.O.S.

$(4x+3y)(4x-3y)$

⑤ $2x^2 - 7x + 5$ ⑥ $3x + 6y$
 $a > 1$ GCF

$(2x-5)(x-1)$

$3(x+2y)$