

p. 230 #28  
factor

"factor out negative"  
"factor out -1"

$$-x^2 - x + 20$$
$$-1(x^2 + x - 20)$$
$$-1(x+5)(x-4)$$

$m = 5$   
 $n = 4$

#32 factor  $y^2 - y$       $y(y-1)$

GCF =  $y$

"factor out GCF"

## Topic : Factoring Patterns

Be alert! You can always use our other factoring methods. But patterns can reduce the work!

- ① difference of squares  
 $a^2 - b^2 = (a+b)(a-b)$   
Ex:  $x^2 - 1 = (x+1)(x-1)$   
Ex:  $81x^2 - 16 = (9x+4)(9x-4)$

- ② square of a difference  
 $a^2 - 2ab + b^2 = (a-b)^2$   
Ex:  $x^2 - 4x + 4 = (x-2)^2$   
Ex:  $x^2 - 8x + 16 = (x-4)^2$