8-5A: Factoring Trinomials: $ax^2 + bx + c$

Due tomorrow p.384 #30, 33; p.397 #1-15 odds

Missing Chapter 8 Quiz

Period 1:	Period 2:	Period 3:
Sarah B.	Holly B.	Andrea A.
	Josh H.	Luis A.
	Edwin G.	Nate C.
		Andrea H.

$x^2 + 3x$

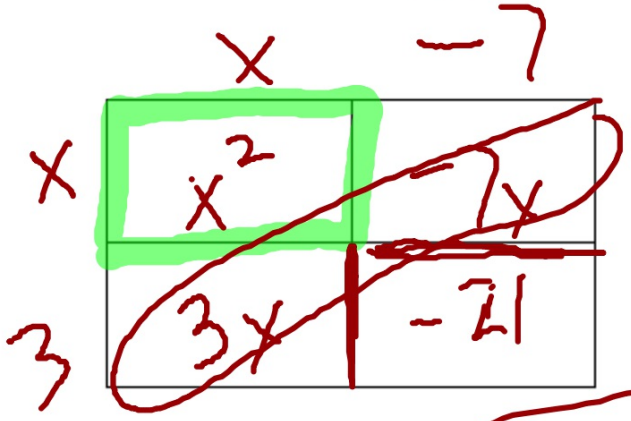
$x^2 \cdot x^2 = x^4$

$x^2 + x^2 = 2x^2$

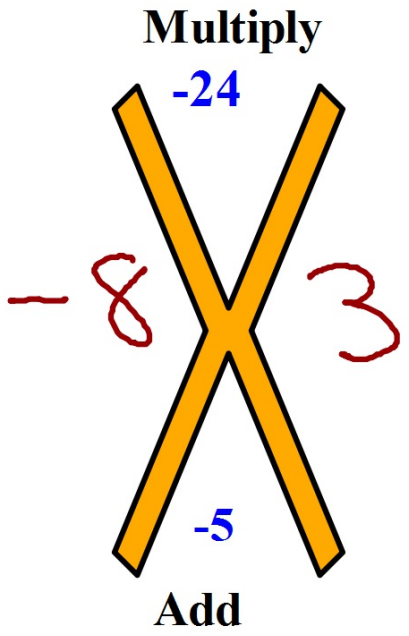
$2x^2 + 5x^2$

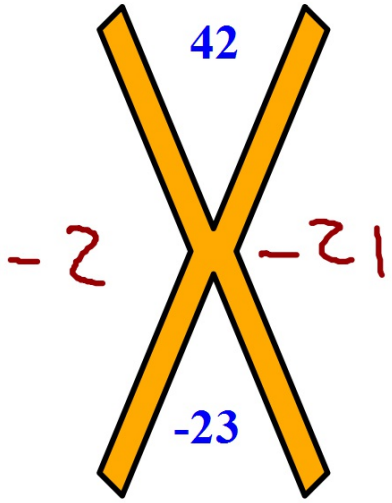
$7x^2$

$(x + 3)(x - 7)$ FOIL



$x^2 - 4x - 21$


Multiply
-24
-8
3
-5
Add


42
-2
-21
-23

→Factoring ax^2+bx+c

→Example: x^2+5x+6

a= 1
b= 5
c= 6

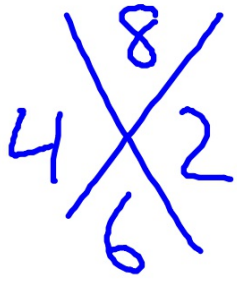
6
3 2
5

(x + 3)(x + 2)

	x	3
x	x2	3x
2	2x	6

Factoring ax^2+bx+c

Example: x^2+6x+8



a=

b=

c=

$(x+4)(x+2)$

$x^2 + 8x + 15$

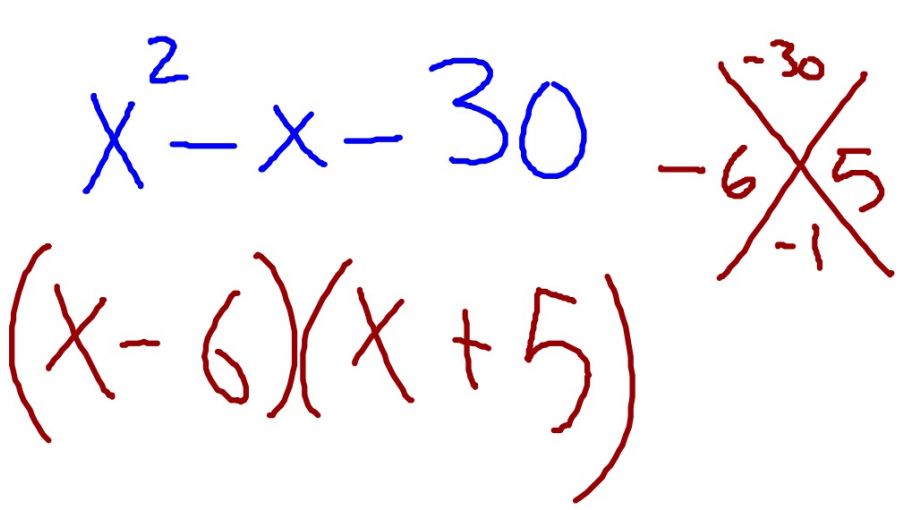
$(x+3)(x+5)$

15

8

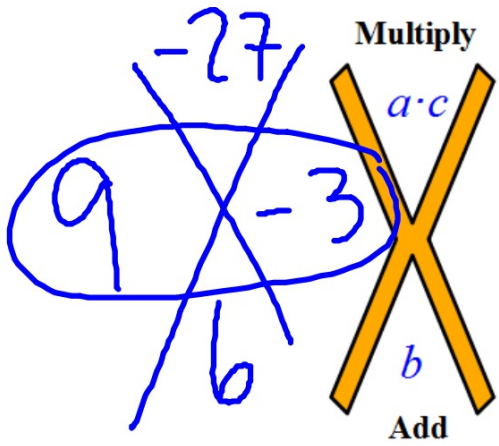
$x^2 - x - 30$

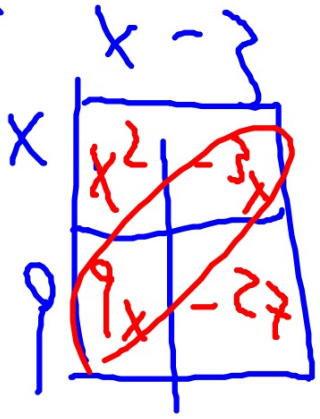
$(x-6)(x+5)$



$m^2 + 6m - 27$

$(m + 9)(m - 3)$



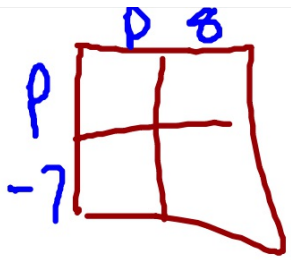


$x^2 - 4x - 77$

30. $(p - 7)(p + 8)$

33. $(5c - 9)(5c + 1)$

Multiply



Complete. *Factor into two binomials.* (white boards)

1. $t^2 + 7t + 10 = (t + 2)(t + \blacksquare)$

2. $y^2 - 13y + 36 = (y - 4)(y - \blacksquare)$

3. $x^2 - 8x + 7 = (x - 1)(x - \blacksquare)$

4. $x^2 + 9x + 18 = (x + 3)(x + \blacksquare)$

Factor each expression. Check your answer.

5. $r^2 + 4r + 3$

6. $n^2 - 3n + 2$

7. $k^2 + 5k + 6$

8. $y^2 + 6y + 8$

9. $x^2 - 2x + 1$

10. $p^2 + 19p + 18$

11. $k^2 - 16k + 28$

12. $w^2 + 6w + 5$

13. $m^2 - 9m + 8$

14. $d^2 + 21d + 38$

15. $t^2 - 13t + 42$

16. $q^2 - 18q + 45$