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

Due next class p.397 #6-16 evens, #17-29 odds

Challenge: #33, 55, 59

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

30) p^2+p-56

33) $25c^2-40c-9$

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

1. (t+2)(t+5)
3. (x-1)(x-7)
5. (r+3)(r+1)
7. (k+3)(k+2)
9. (x-1)(x-1)
11. (k-14)(k-2)
13. (m-1)(m-8)
15. (t-7)(t-6)

Missing Chapter 8 Quiz

Period 1:
Sarah B.

Period 2:
Holly B.
Edwin G.

Period 3:
Andrea A.
Luis A.
Nate C.
Andrea H.

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

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

Multiply

Complete. *Factor into two binomials.*

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

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

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

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

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. $m^2 - 9m + 8$

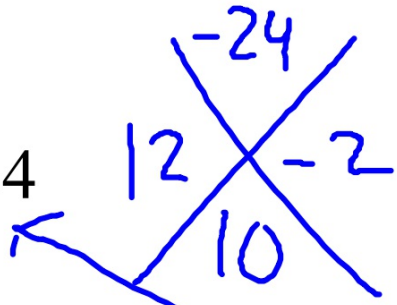
14. $d^2 + 21d + 38$

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

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

Factoring ax^2+bx+c

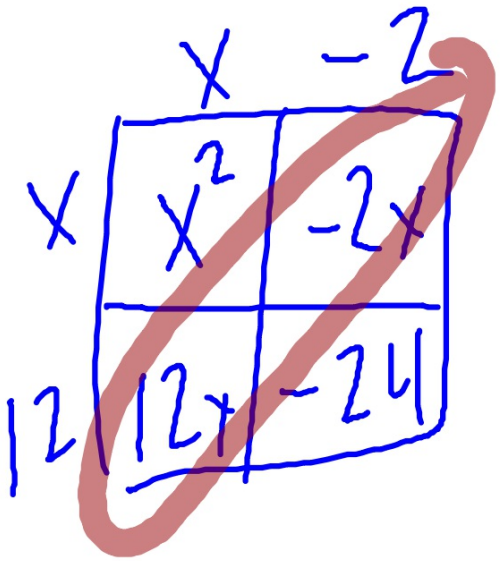
Example: $x^2+10x-24$



a=1

b=10 $(x+12)(x-2)$

c=-24



$x^2+10x-24$

1) Multiply the two binomials. (FOIL or Box)

$(2x + 1)(3x - 4)$

$6x^2 - 5x - 4$

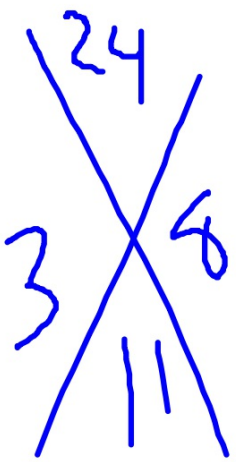
	$3x$	-4
$2x$	$6x^2$	$-8x$
1	$3x$	-4

2) Factor the trinomial into two binomials.

$x^2 + 11x + 24$

$(x + 3)(x + 8)$

	x	3
x	x^2	$3x$
8	$8x$	24



1, 24

2, 12

3, 8

Factoring ax^2+bx+c

Example:

a=

b= ( )( )

c=