8-6A: Factoring Trinomials: $ax^2 + bx + c$

Due next class: p.401 #1-13 odds

Due today p.397 #6-16 evens, #17-29 odds Challenge: #33, 55, 59

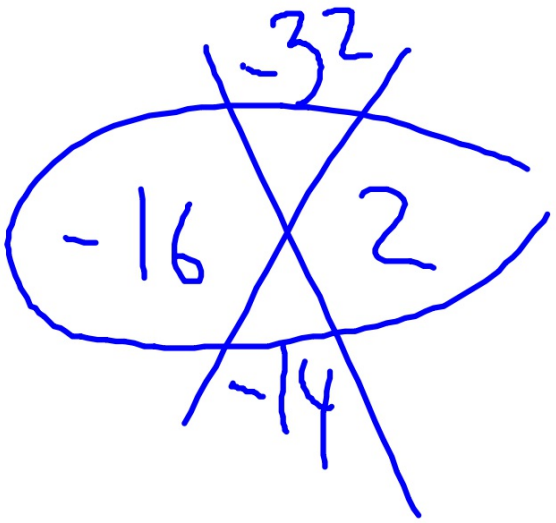
6. (n-2)(n-1)
8. (y+4)(y+2)
10. (p+18)(p+1)
12. (w+5)(w+1)
14. (d+19)(d+2)
16. (q-15)(q-3)
17. (m-2)(m+5)
19. (k+1)(k-9)
21. (x+4)(x-1)
23. (y+5)(y-4)
25. (x-16)(x+2)
27. (m+2)(m-15)
29. (p+3)(p-18)
33. (t+9v)(t-2v)
55. $4x^2+12x+5$
$(2x+1)(2x+5)$
59. $(x^6+7)(x^6+5)$

Missing Chapter 8 Quiz

Period 2:
Holly B.
Edwin G.

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

25. $x^2 - 14x - 32$



$(x-16)(x+2)$

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. $q^2 - 18q + 45$

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

□ $(3x + 1)(5x - 4)$

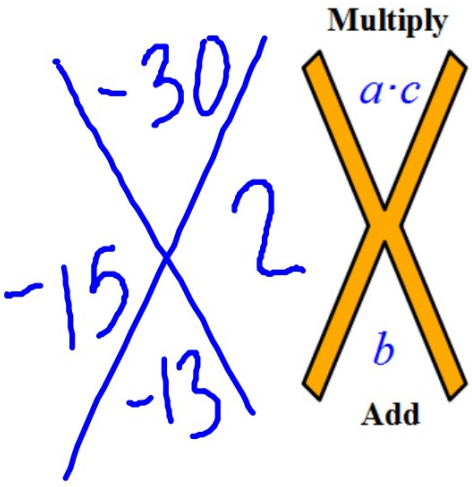
	$5x$	-4
$3x$	$15x^2$	$-12x$
1	$5x$	-4

$15x^2 - 7x - 4$

2) Factor the trinomial into two binomials.

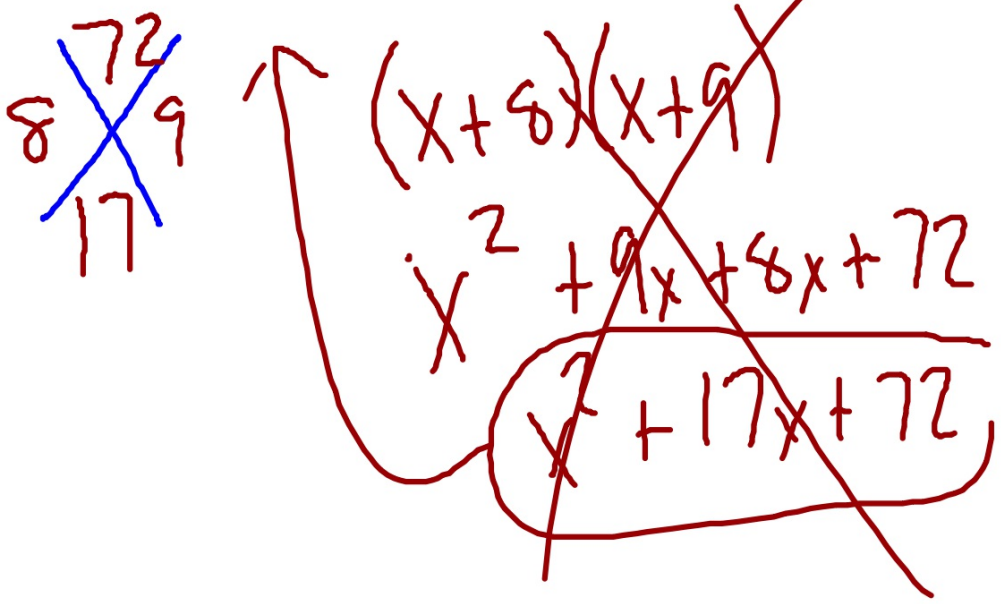
$x^2 - 13x - 30$

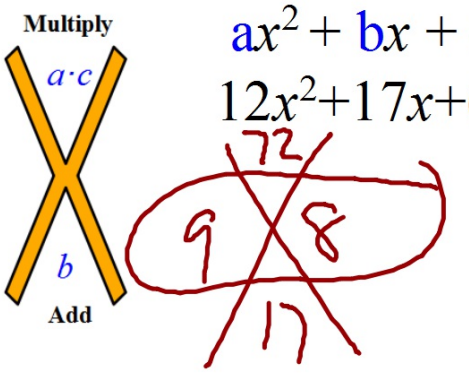
$(x - 15)(x + 2)$



How do we factor this trinomial?

$12x^2+17x+6$





$ax^2 + bx + c$

$12x^2+17x+6$

72

9 8

17

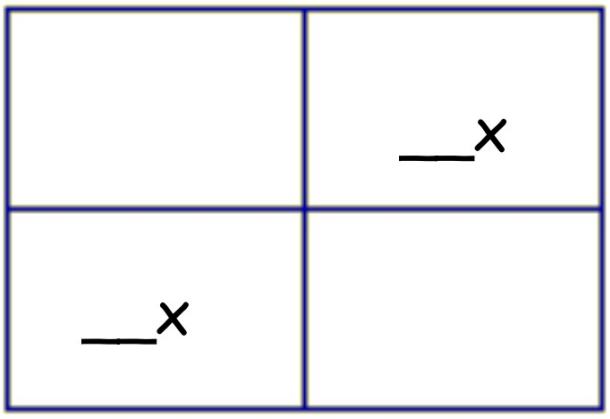
	4x	3
3x	$12x^2$	$9x$
2	$8x$	6

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

1) Identify a, b, and c.
2) fill out and solve the diamond
3) fill out the rectangle
4) Find the GCF
3) fill in the rest of the rectangle and find your factors

$ax^2 + bx + c$

$3x^2 + 19x + 20$



ax
c

1) Identify a, b, and c.
2) fill out and solve the diamond
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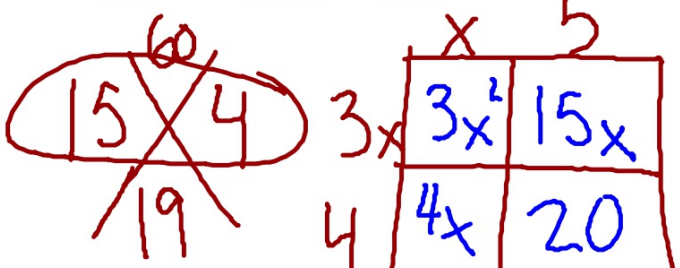
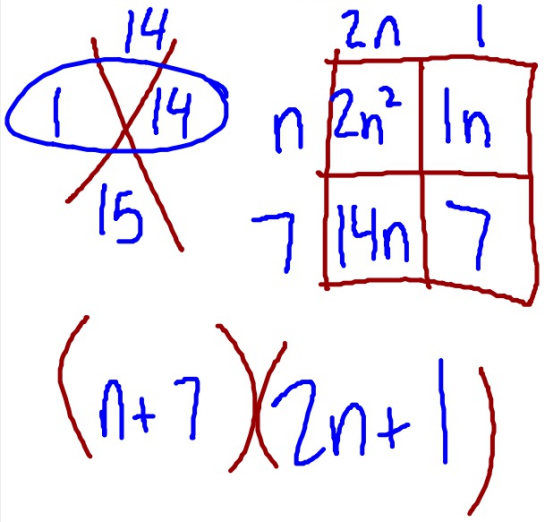
$3x^2 + 19x + 20$



	x	5
3x	$3x^2$	15x
4	4x	20

$(3x+4)(x+5)$

1. $2n^2 + 15n + 7$



$(n+7)(2n+1)$

2. $7d^2 + 50d + 7$

Factor each expression.

1. $2n^2 + 15n + 7$

2. $7d^2 + 50d + 7$

3. $11w^2 - 14w + 3$

4. $3x^2 - 17x + 10$

5. $6t^2 + 25t + 11$

6. $3d^2 - 17d + 20$

7. $16m^2 + 26m + 9$

8. $15p^2 - 26p + 11$

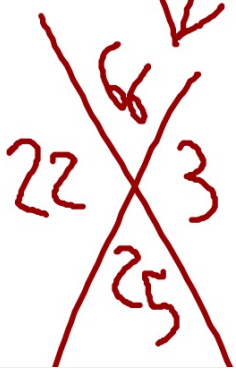
9. $8y^2 + 30y + 13$

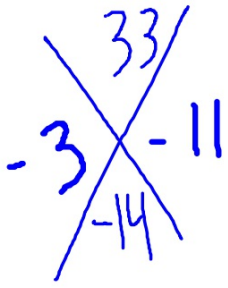
10. $2y^2 + 35y + 17$

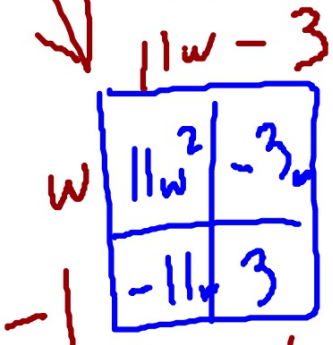
11. $7x^2 - 30x + 27$

12. $8x^2 + 18x + 9$

13. $2t^2 - t - 3$







$(w-1)(11w-3)$