Algebra 2
Multiplying Monomials and Binomials

Name: _____
Date: _____ Block: ____

Find each product.

1. $5(2x-1)$

$10x-5$

2. $4(5n+2)$

$20n+8$

3. $3x(x+1)$

$3x^2+3x$

4. $2x(3x-5)$

$6x^2-10x$

5. $5x(5x-3)$

$25x^2-15x$

6. $6x(4x+7)$

$24x^2+42x$

7. $(x+4)(x+3)$

$x^2+7x+12$

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8. $(x-3)(x-2)$

x^2-5x+6

same signs

Both neg.

9. $(x+6)(x-1)$

x^2+5x-6

+ factor bigger

opp signs

10. $(x-4)(x+7)$

$x^2+3x-28$

Find the special product. $(a+b)(a-b)=a^2-b^2$

11. $(x+3)(x-3)$

x^2-9

12. $(x-12)(x+12)$

x^2-144

13. $(2x+5)(2x-5)$

$4x^2-25$

14. $(4x-11)(4x+11)$

$16x^2-121$

15. $(x+4)(x+4)$

$x^2+4x+4x+16$

$x^2+8x+16$

$(a+b)(a+b)=a^2+2ab+b^2$

16. $(x-8)(x-8)$

$x^2-8x-8x+64$

$x^2-16x+64$

$(a-b)(a-b)=a^2-2ab+b^2$

Think! How are the problems below like #15 and #16? Compare the answers and see if they make sense.

17. $(x+9)^2$ $=(x+9)(x+9)$

$x^2+18x+81$

18. $(x-6)^2$ $=(x-6)(x-6)$

$x^2-12x+36$

19. $(4x-1)^2$

$16x^2-8x+1$

20. $(5x+2)^2$

$25x^2+20x+4$