Name _____ Date _____

Factoring

Factoring Trinomials of the Form $ax^2 + bx + c$

$2x^2 - 8x - 10 = 2(x^2 - 4x - 5) = 2(x - 5)(x + 1)$

Factor.

1. $12x^2 - 156x + 144 =$ $12(x-12)(x-1)$
2. $6x^2 - 15x + 6 =$ $3(2x-1)(x-2)$
3. $2x^2 + 9x + 10 =$ $(2x+5)(x+2)$
4. $4x^2 - 18x + 20 =$ $2(2x-5)(x-2)$
5. $3x^2 - 10x + 7 =$ $(3x-7)(x-1)$
6. $3x^2 - 5x - 12 =$ $(3x+4)(x-3)$
7. $3x^2 - 4x - 32 =$ $(3x+8)(x-4)$
8. $5x^2 + 25x + 30 =$ $5(x+2)(x+3)$
9. $3x^2 - 20x - 7 =$ $(3x+1)(x-7)$
10. $6x^2 - 15x - 21 =$ $3(x+1)(2x-7)$
11. $7c^2 - 16c + 9 =$ $(7c-9)(c-1)$
12. $7x^2 - 26x - 8 =$ $(7x+2)(x-4)$
13. $2x^2 + 17x + 21 =$ $(2x+3)(x+7)$
14. $6a^2 - 21a + 15 =$ $3(2a-5)(a-1)$
15. $2y^2 - 17y + 35 =$ $(2y-7)(y-5)$
16. $12x^2 - 6x - 18 =$ $6(2x-3)(x+1)$
17. $4x^2 + 7x - 15 =$ $(4x-5)(x+3)$
18. $6x^2 - 25x - 25 =$ $(6x+5)(x-5$
19. $4x^2 - 23x + 15 =$ $(4x-3)(x-5)$
20. $3x^2 + 19x + 20 =$ $(3x+4)(x+5)$