Factoring with a Difference of Squares and Perfect Trinomials (Solutions)

III. Factoring the Difference of Two Squares

1. $(x+1)(x-1)$
2. $(x+3)(x-3)$
3. prime
4. $(x+5)(x-5)$
5. $(3y+4)(3y-4)$
6. $(2x+5)(2x-5)$
7. $(3x+1)(3x-1)$
8. $(a+x)(a-x)$
9. $(5+m)(5-m)$
10. $(x+4y)(x-4y)$
11. $(5m+n)(5m-n)$
12. $(4+x)(4-x)$
13. $(6m+11)(6m-11)$
14. $2(x+2)(x-2)$
15. prime
16. $(2a+9b)(2a-9b)$
17. $3(2x+5)(2x-5)$
18. $b(a+b)(a-b)$
19. $-2(7+x)(7-x)$ *or* $2(x+7)(x-7)$
20. $5(x+3y)(x-3y)$
21. $(3x^2+2)(3x^2-2)$
22. $(4x^2+y)(4x^2-y)$

IV. Factoring Perfect Square Trinomials

1. $(x+4)^2$
2. $(x-8)^2$
3. $(y+6)^2$
4. $(a-5)^2$
5. $(4y+1)^2$
6. $(3x-1)^2$
7. $(5x+1)^2$
8. $(n-7)^2$
9. $(9x-5)^2$
10. $(2y-5)^2$
11. $(5a+6)^2$
12. $(4+5x)^2$
13. $(4x+3)^2$
14. $(7x-1)^2$
15. $(3y-5)^2$
16. prime
17. $(b+1)^2$
18. $(6x+7)^2$
19. $(x-9)^2$
20. $(3y-2)^2$