Name Schlansky
Mr. Schlansky

Date _____
Algebra II

Factoring Tricky Trinomials

Factor all of the following polynomials

1. $2y^2 - 5y - 7$ PT

$y^2 - 5y - 14$

$(y - 7)(y + 2)$

$(2y - 7)(y + 1)$

2. $2x^2 + 15x - 8$ PT

$x^2 + 15x - 16$

$(x + 16)(x - 1)$

$(x + 8)(2x - 1)$

3. $4x^2 + 4x - 3$ PT

$x^2 + 4x - 12$

$(x + 6)(x - 2)$

$(x + \frac{3}{2})(x - \frac{1}{2})$

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

4. $6x^2 + 13x + 5$ PT

$x^2 + 13x + 30$

$(x + 10)(x + 3)$

$(x + \frac{5}{3})(x + \frac{1}{2})$

$(3x + 5)(2x + 1)$

5. $3y^2 + 4y + 1$ PT

$y^2 + 4y + 3$

$(y + 3)(y + 1)$

$(y + 1)(3y + 1)$

6. $12y^2 - 5y - 2$ PT

$y^2 - 5y - 24$

$(y - 8)(y + 3)$

$(y - \frac{2}{3})(y + \frac{1}{4})$

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

7. $12x^2 + 7x + 1$ PT

$x^2 + 7x + 12$

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

$(x + \frac{1}{3})(x + \frac{1}{4})$

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

8. $2x^2 + 13x + 6$ PT

$x^2 + 13x + 12$

$(x + 12)(x + 1)$

$(x + 6)(2x + 1)$

9. $2x^2+7x-4$ PT

x^2+7x-8

$(x+8)(x-1)$

$\frac{2}{2}\quad\frac{2}{2}$

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

10. $6x^2-11x-10$ PT

$x^2-11x-60$

$(x-15)(x+4)$

$\frac{6}{6}\quad\frac{6}{6}$

$(x-\frac{5}{2})(x+\frac{2}{3})$

$(2x-5)(3x+2)$

11. $2x^2-9x-18$ PT

$x^2-9x-36$

$(x-12)(x+3)$

$\frac{2}{2}\quad\frac{2}{2}$

$(x-6)(2x+3)$

12. $3x^2+2x-8$ PT

$x^2+2x-24$

$(x+6)(x-4)$

$\frac{3}{3}\quad\frac{3}{3}$

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

13. $4y^2+9y+2$ PT

y^2+9y+8

$(y+8)(y+1)$

$\frac{4}{4}\quad\frac{4}{4}$

$(y+2)(4y+1)$

14. $5x^2+3x-2$ PT

$x^2+3x-10$

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

$\frac{5}{5}\quad\frac{5}{5}$

$(x+1)(5x-2)$

15. $6x^2+x-12$ PT

x^2+x-72

$(x+9)(x-8)$

$\frac{6}{6}\quad\frac{6}{6}$

$(x+\frac{3}{2})(x-\frac{4}{3})$

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

16. $8x^2+7x-1$ PT

x^2+7x-8

$(x+8)(x-1)$

$\frac{8}{8}\quad\frac{8}{8}$

$(x+1)(8x-1)$