

5.3 Trinomials

Name _____

Factor.	
1. $x^2 + 5x + 6$	2. $x^2 + 8x + 15$
3. $x^2 - 5x + 6$	4. $x^2 - 8x + 15$
5. $x^2 - 9x + 14$	6. $x^2 - 7x + 12$
7. $x^2 - 9x + 18$	8. $x^2 - 7x + 10$
9. $x^2 + 3x - 18$	10. $x^2 + 2x - 15$
11. $x^2 + 4x - 10$	12. $x^2 + 7x - 20$
Answers: 1. $(x + 2)(x + 3)$; 3. $(x - 2)(x - 3)$; 5. $(x - 2)(x - 7)$; 7. $(x - 3)(x - 6)$; 9. $(x - 3)(x + 6)$; 11. prime	

Factor.	
13. $x^2 + 5xy - 6y^2$	14. $x^2 + 7xy - 8y^2$
15. $x^2 - xy - 12y^2$	16. $x^2 + 11xy - 12y^2$
Factor completely.	
17. $3x^2 - 15x + 18$	18. $2x^2 + 4x - 30$
19. $x^2y + 6xy + 8y$	20. $4x^2y - 12xy - 40y$
Answers: 13. $(x - y)(x + 6y)$; 15. $(x + 3y)(x - 4y)$; 17. $3(x - 2)(x - 3)$; 19. $y(x + 2)(x + 4)$	

Factor.

21. $3x^2 + 14x + 8$

22. $2x^2 + 7x + 6$

23. $2x^2 - 11x + 12$

24. $3x^2 - 17x + 10$

Answers: **21.** $(x + 4)(3x + 2)$; **23.** $(x - 4)(2x - 3)$

Factor.

25. $6x^2 - 11x - 10$

26. $8x^2 - 11x + 3$

27. $4x^2 + 5x + 2$

28. $6x^2 - 2x + 5$

Answers: **25.** $(2x - 5)(3x + 2)$; **27.** prime