

# WORKSHEET

Expand & simplify.

- |                        |                        |                       |                        |
|------------------------|------------------------|-----------------------|------------------------|
| 1. $(x + 11)(x + 8)$   | 13. $(x + 9)(x + 6)$   | 25. $(x + 12)(x + 9)$ | 37. $(x + 11)(x + 2)$  |
| 2. $(x + 13)(x + 3)$   | 14. $(x + 5)^2$        | 26. $(x + 9)(x + 4)$  | 38. $(x + 12)(x + 7)$  |
| 3. $(x + 13)^2$        | 15. $(x + 10)(x + 3)$  | 27. $(x + 13)^2$      | 39. $(x + 13)(x + 10)$ |
| 4. $(x + 12)^2$        | 16. $(x + 12)(x + 10)$ | 28. $(x + 8)(x + 2)$  | 40. $(x + 13)(x + 7)$  |
| 5. $(x + 11)(x + 5)$   | 17. $(x + 5)(x + 2)$   | 29. $(x + 9)(x + 8)$  | 41. $(x + 12)(x + 10)$ |
| 6. $(x + 11)(x + 10)$  | 18. $(x + 12)(x + 8)$  | 30. $(x + 7)(x + 4)$  | 42. $(x + 10)(x + 5)$  |
| 7. $(x + 8)^2$         | 19. $(x + 10)(x + 8)$  | 31. $(x + 5)(x + 4)$  | 43. $(x + 9)(x + 2)$   |
| 8. $(x + 10)(x + 8)$   | 20. $(x + 12)(x + 8)$  | 32. $(x + 7)(x + 2)$  | 44. $(x + 10)(x + 5)$  |
| 9. $(x + 9)(x + 3)$    | 21. $(x + 5)^2$        | 33. $(x + 12)(x + 7)$ | 45. $(x + 13)(x + 4)$  |
| 10. $(x + 8)(x + 3)$   | 22. $(x + 13)(x + 7)$  | 34. $(x + 10)(x + 9)$ | 46. $(x + 9)(x + 6)$   |
| 11. $(x + 13)(x + 10)$ | 23. $(x + 12)(x + 2)$  | 35. $(x + 10)(x + 8)$ | 47. $(x + 13)(x + 7)$  |
| 12. $(x + 6)(x + 4)$   | 24. $(x + 10)(x + 4)$  | 36. $(x + 7)(x + 2)$  | 48. $(x + 3)(x + 2)$   |

— Answers —

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|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. $x^2 + 19x + 88$   | 13. $x^2 + 15x + 54$  | 25. $x^2 + 21x + 108$ | 37. $x^2 + 13x + 22$  |
| 2. $x^2 + 16x + 39$   | 14. $x^2 + 10x + 25$  | 26. $x^2 + 13x + 36$  | 38. $x^2 + 19x + 84$  |
| 3. $x^2 + 26x + 169$  | 15. $x^2 + 13x + 30$  | 27. $x^2 + 26x + 169$ | 39. $x^2 + 23x + 130$ |
| 4. $x^2 + 24x + 144$  | 16. $x^2 + 22x + 120$ | 28. $x^2 + 10x + 16$  | 40. $x^2 + 20x + 91$  |
| 5. $x^2 + 16x + 55$   | 17. $x^2 + 7x + 10$   | 29. $x^2 + 17x + 72$  | 41. $x^2 + 22x + 120$ |
| 6. $x^2 + 21x + 110$  | 18. $x^2 + 20x + 96$  | 30. $x^2 + 11x + 28$  | 42. $x^2 + 15x + 50$  |
| 7. $x^2 + 16x + 64$   | 19. $x^2 + 18x + 80$  | 31. $x^2 + 9x + 20$   | 43. $x^2 + 11x + 18$  |
| 8. $x^2 + 18x + 80$   | 20. $x^2 + 20x + 96$  | 32. $x^2 + 9x + 14$   | 44. $x^2 + 15x + 50$  |
| 9. $x^2 + 12x + 27$   | 21. $x^2 + 10x + 25$  | 33. $x^2 + 19x + 84$  | 45. $x^2 + 17x + 52$  |
| 10. $x^2 + 11x + 24$  | 22. $x^2 + 20x + 91$  | 34. $x^2 + 19x + 90$  | 46. $x^2 + 15x + 54$  |
| 11. $x^2 + 23x + 130$ | 23. $x^2 + 14x + 24$  | 35. $x^2 + 18x + 80$  | 47. $x^2 + 20x + 91$  |
| 12. $x^2 + 10x + 24$  | 24. $x^2 + 14x + 40$  | 36. $x^2 + 9x + 14$   | 48. $x^2 + 5x + 6$    |

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