

## **FACTORING WORKSHEET A**

### **A**

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|-------------------------------|---------------------------------|--------------------------------|---------------------|
| 1. $y^2 - 5y$                 | 2. $4a^2 + 2a$                  | 3. $6y^2 + 3y$                 | 4. $y^3 + 9y^2$     |
| 5. $x^3 + 8x^2$               | 6. $3y^2 - 3y - 9$              | 7. $5x^2 - 5x + 15$            | 8. $6x^2 - 3x^4$    |
| 9. $8y^2 + 4y^4$              | 10. $4ab - 6ac + 12ad$          | 11. $8xy + 10xz - 14xw$        |                     |
| 12. $4x^2y - 12xy^2$          | 13. $5x^2y^3 + 15x^3y^2$        | 14. $x^6 + x^5 - x^3 + x^2$    |                     |
| 15. $y^4 - y^3 + y^2 + y$     | 16. $24x^3 - 36x^2 + 72x$       | 17. $10a^4 + 15a^2 - 25a - 30$ |                     |
| 18. $y^2 - 6y + 9$            | 19. $x^2 - 8x + 16$             | 20. $x^2 + 14x + 49$           |                     |
| 21. $x^2 + 16x + 64$          | 22. $x^2 + 1 + 2x$              | 23. $x^2 + 1 - 2x$             |                     |
| 24. $a^2 + 4a + 4$            | 25. $a^2 - 4a + 4$              | 26. $y^2 + 36 - 12y$           |                     |
| 27. $y^2 + 36 + 12y$          | 28. $-18y^2 + y^3 + 81y$        | 29. $24a^2 + a^3 + 144a$       |                     |
| 30. $12a^2 + 36a + 27$        | 31. $20y^2 + 100y + 125$        | 32. $2x^2 - 40x + 200$         |                     |
| 33. $32x^2 + 48x + 18$        | 34. $1 - 8d + 16d^2$            | 35. $64 + 25y^2 - 80y$         |                     |
| 36. $x^2 - 16$                | 37. $y^2 - 9$                   | 38. $9x^2 - 25$                | 39. $4a^2 - 49$     |
| 40. $4x^2 - 25$               | 41. $100y^2 - 81$               | 42. $6x^2 - 6y^2$              | 43. $8x^2 - 8y^2$   |
| 44. $3x^8 - 3y^8$             | 45. $5x^4 - 5y^4$               | 46. $4xy^4 - 4xz^4$            | 47. $9a^4 - a^2b^2$ |
| 48. $a^2 + 2ab + b^2 - 9$     | 49. $x^2 - 2xy + y^2 - 25$      | 50. $r^2 - 2r + 1 - 4s^2$      |                     |
| 51. $c^2 + 4cd + 4d^2 - 9p^2$ | 52. $2m^2 + 4mn + 2n^2 - 50b^2$ | 53. $12x^2 + 12x + 3 - 3y^2$   |                     |
| 54. $9 - (a^2 + 2ab + b^2)$   | 55. $16 - (x^2 - 2xy + y^2)$    | 56. $ac + ad + bc + bd$        |                     |
| 57. $xy + xz + wy + wz$       | 58. $b^3 - b^2 + 2b - 2$        | 59. $y^3 - y^2 + 3y - 3$       |                     |
| 60. $y^2 - 8y - y + 8$        | 61. $t^2 + 6t - 2t - 12$        | 62. $2y^4 + 6y^2 + 5y^2 + 15$  |                     |
| 63. $2xy - x^2y - 6 + 3x$     |                                 |                                |                     |

### **B**

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|---|--|
| 64. $\frac{4}{7}x^6 - \frac{6}{7}x^4 + \frac{1}{7}x^2 - \frac{3}{7}x$ | 65. $4y^{4a} + 12y^{2a} + 10y^{2a} + 30$ |
| 66. $0.25 - y^2$  | 67. $0.04x^2 - 0.09y^2$                  |
| 68. $\frac{1}{25} - x^2$  | 69. $\frac{1}{36}y^4 - \frac{1}{81}x^2$  |