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Simplify. Remember that  $x^2$  and  $x$  are not like terms.

| Problem                           | Answer | Problem                             | Answer |
|-----------------------------------|--------|-------------------------------------|--------|
| 1. $-3x + 8 + 2x - 5 - 2y - 2$    |        | 11. $-7x^2 + 2 + 3x^2 + 8 + 5y + 7$ |        |
| 2. $3x^2 - 7 - 7y + 5 - 7y - 5$   |        | 12. $4x^2 - 1 + 7y - 8 + 3x^2 - 8$  |        |
| 3. $-6y + 5 - y + 4 - 2x^2 - 9$   |        | 13. $-y + 1 - 4x^2 - 2 + 5y - 4$    |        |
| 4. $4y - 7 - 7x + 3 - 4y + 6$     |        | 14. $2x - 4 - 8x - 8 + 7x^2 - 1$    |        |
| 5. $9x^2 + 4 - 7x - 1 + 7x^2 + 3$ |        | 15. $8x^2 + 9 - 4y + 3 + 3x^2 + 4$  |        |
| 6. $7y - 6 - 2x^2 - 4 + 7x^2 - 8$ |        | 16. $3x^2 + 7 + 8y - 1 - 3y + 7$    |        |
| 7. $3x^2 - 8 - 9y + 9 + 3x^2 - 9$ |        | 17. $3y + 3 - 3y - 7 + 4x - 6$      |        |
| 8. $y - 4 + 9x^2 - 4 + 3y + 3$    |        | 18. $y + 5 + 3x + 3 - 6y + 4$       |        |
| 9. $-7x + 3 - 9x + 3 - 2x - 3$    |        | 19. $4x^2 + 8 - 8x^2 + 4 + x - 3$   |        |
| 10. $3x + 4 + 5y - 4 + 9x^2 - 3$  |        | 20. $-9x - 3 - 8y - 3 + 7y - 9$     |        |

### Answer key — Combining like terms — Level 3

| #  | Problem                         | Answer               |
|----|---------------------------------|----------------------|
| 1  | $-3x + 8 + 2x - 5 - 2y - 2$     | $-x - 2y + 1$        |
| 2  | $3x^2 - 7 - 7y + 5 - 7y - 5$    | $3x^2 - 14y - 7$     |
| 3  | $-6y + 5 - y + 4 - 2x^2 - 9$    | $-2x^2 - 7y$         |
| 4  | $4y - 7 - 7x + 3 - 4y + 6$      | $-7x + 2$            |
| 5  | $9x^2 + 4 - 7x - 1 + 7x^2 + 3$  | $16x^2 - 7x + 6$     |
| 6  | $7y - 6 - 2x^2 - 4 + 7x^2 - 8$  | $5x^2 + 7y - 18$     |
| 7  | $3x^2 - 8 - 9y + 9 + 3x^2 - 9$  | $6x^2 - 9y - 8$      |
| 8  | $y - 4 + 9x^2 - 4 + 3y + 3$     | $9x^2 + 4y - 5$      |
| 9  | $-7x + 3 - 9x + 3 - 2x - 3$     | $-18x + 3$           |
| 10 | $3x + 4 + 5y - 4 + 9x^2 - 3$    | $9x^2 + 3x + 5y - 3$ |
| 11 | $-7x^2 + 2 + 3x^2 + 8 + 5y + 7$ | $-4x^2 + 5y + 17$    |
| 12 | $4x^2 - 1 + 7y - 8 + 3x^2 - 8$  | $7x^2 + 7y - 17$     |
| 13 | $-y + 1 - 4x^2 - 2 + 5y - 4$    | $-4x^2 + 4y - 5$     |
| 14 | $2x - 4 - 8x - 8 + 7x^2 - 1$    | $7x^2 - 6x - 13$     |
| 15 | $8x^2 + 9 - 4y + 3 + 3x^2 + 4$  | $11x^2 - 4y + 16$    |
| 16 | $3x^2 + 7 + 8y - 1 - 3y + 7$    | $3x^2 + 5y + 13$     |
| 17 | $3y + 3 - 3y - 7 + 4x - 6$      | $4x - 10$            |
| 18 | $y + 5 + 3x + 3 - 6y + 4$       | $3x - 5y + 12$       |
| 19 | $4x^2 + 8 - 8x^2 + 4 + x - 3$   | $-4x^2 + x + 9$      |
| 20 | $-9x - 3 - 8y - 3 + 7y - 9$     | $-9x - y - 15$       |

## Notes