

Simplifying Quadratic Expressions (I)

Simplify each expression by combining like terms.

1. $8 - d - 2d^2 + 7d^2 + 3d^2 + 4d - 2d^2 - 8d^2$

2. $-2m^2 + 7 - 1 + 7 + 2m + 9m^2 + 2m^2 + 2m^2$

3. $-1 - 6w - 8w - 5w^2 - 5 + 2 + 3w + 9$

4. $9 + 5k + 9k^2 - 6k^2 + 9 - k + 2k + 7$

5. $-3v + 5 + 4v + 6 + 2v^2 - 4v^2 + 7v + 2$

6. $-5x + 5x^2 - 2x + 5 + x^2 + 9x^2 + 5 + 2x^2$

7. $-7t^2 + 3t^2 - 2t^2 + 2 + 2t - 3 - 7t^2 - 4t^2$

8. $-7y - 7y - 3 + 8y^2 - 9y - 7y - 5y^2 - 7y$

9. $3j - 9j^2 + 9 + 1 - 7j^2 + j^2 + 1 + 7$

10. $-v + 2 + 5 - 7v^2 + 3v + 5v + 9v^2 - 8$

Simplifying Quadratic Expressions (I) Answers

Simplify each expression by combining like terms.

$$1. 8 - d - 2d^2 + 7d^2 + 3d^2 + 4d - 2d^2 - 8d^2 \\ = -2d^2 + 3d + 8$$

$$2. -2m^2 + 7 - 1 + 7 + 2m + 9m^2 + 2m^2 + 2m^2 \\ = 11m^2 + 2m + 13$$

$$3. -1 - 6w - 8w - 5w^2 - 5 + 2 + 3w + 9 \\ = -5w^2 - 11w + 5$$

$$4. 9 + 5k + 9k^2 - 6k^2 + 9 - k + 2k + 7 \\ = 3k^2 + 6k + 25$$

$$5. -3v + 5 + 4v + 6 + 2v^2 - 4v^2 + 7v + 2 \\ = -2v^2 + 8v + 13$$

$$6. -5x + 5x^2 - 2x + 5 + x^2 + 9x^2 + 5 + 2x^2 \\ = 17x^2 - 7x + 10$$

$$7. -7t^2 + 3t^2 - 2t^2 + 2 + 2t - 3 - 7t^2 - 4t^2 \\ = -17t^2 + 2t - 1$$

$$8. -7y - 7y - 3 + 8y^2 - 9y - 7y - 5y^2 - 7y \\ = 3y^2 - 37y - 3$$

$$9. 3j - 9j^2 + 9 + 1 - 7j^2 + j^2 + 1 + 7 \\ = -15j^2 + 3j + 18$$

$$10. -v + 2 + 5 - 7v^2 + 3v + 5v + 9v^2 - 8 \\ = 2v^2 + 7v - 1$$