

Simplifying Quadratic Expressions (F)

Simplify each expression by combining like terms.

$$1. -5 + 2m^2 - 6m - 6m^2 + 9m^2 - 6 - 8m^2 + 7m$$

$$2. -m^2 - m - 5m^2 + 4m^2 + m^2 + 8m^2 - 6m^2 + 5m$$

$$3. 9c - 7c + 9c^2 - 9c - 7c^2 - 5 + c + 4c$$

$$4. 9t^2 - 8t + 2t^2 + t + 5 - 8 - 4 - 8$$

$$5. 8v^2 + 2 - 6v - 9v - v + 1 + 5v^2 - 4$$

$$6. -5x^2 - 5 + x + 6x - 2x^2 + 4x^2 - 4x + x^2$$

$$7. 7m^2 + 3m - 1 + 7m - m - 5m^2 - 7 - 3m^2$$

$$8. 9x^2 + 3x^2 + 6x + 2 + 6x^2 + 2 - x^2 - 8x^2$$

$$9. -n + 2n^2 - 3n - 8n - 1 + 5n - 8n + 5$$

$$10. 7c - 9c + 8c^2 - 3c^2 + c + 6c + 4c^2 + 4$$

Simplifying Quadratic Expressions (F) Answers

Simplify each expression by combining like terms.

$$\begin{aligned}1. \quad & -5 + 2m^2 - 6m - 6m^2 + 9m^2 - 6 - 8m^2 + 7m \\& = -3m^2 + m - 11\end{aligned}$$

$$\begin{aligned}2. \quad & -m^2 - m - 5m^2 + 4m^2 + m^2 + 8m^2 - 6m^2 + 5m \\& = m^2 + 4m\end{aligned}$$

$$\begin{aligned}3. \quad & 9c - 7c + 9c^2 - 9c - 7c^2 - 5 + c + 4c \\& = 2c^2 - 2c - 5\end{aligned}$$

$$\begin{aligned}4. \quad & 9t^2 - 8t + 2t^2 + t + 5 - 8 - 4 - 8 \\& = 11t^2 - 7t - 15\end{aligned}$$

$$\begin{aligned}5. \quad & 8v^2 + 2 - 6v - 9v - v + 1 + 5v^2 - 4 \\& = 13v^2 - 16v - 1\end{aligned}$$

$$\begin{aligned}6. \quad & -5x^2 - 5 + x + 6x - 2x^2 + 4x^2 - 4x + x^2 \\& = -2x^2 + 3x - 5\end{aligned}$$

$$\begin{aligned}7. \quad & 7m^2 + 3m - 1 + 7m - m - 5m^2 - 7 - 3m^2 \\& = -m^2 + 9m - 8\end{aligned}$$

$$\begin{aligned}8. \quad & 9x^2 + 3x^2 + 6x + 2 + 6x^2 + 2 - x^2 - 8x^2 \\& = 9x^2 + 6x + 4\end{aligned}$$

$$\begin{aligned}9. \quad & -n + 2n^2 - 3n - 8n - 1 + 5n - 8n + 5 \\& = 2n^2 - 15n + 4\end{aligned}$$

$$\begin{aligned}10. \quad & 7c - 9c + 8c^2 - 3c^2 + c + 6c + 4c^2 + 4 \\& = 9c^2 + 5c + 4\end{aligned}$$