

Simplifying Quadratic Expressions (D)

Simplify each expression by combining like terms.

1. $-2p + p^2 + 6p^2 + 6p^2 - 2p - 8 - 8p^2$

2. $f - 7f - 6f^2 - 7f^2 + 7f^2 + 5 + 4f^2$

3. $7 + 3 - 8s - 6 - 2s^2 + 7s^2 + 3s^2$

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

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

6. $3p - 5 - 9p + 3p^2 - 8p - p^2 - 3p$

7. $-8a^2 - 2a^2 + 1 - 7 + 2a^2 - 8a^2 + 6a^2$

8. $8p^2 - 9p^2 - 1 - 9 - 3p + 4 - 3p$

9. $-3 + 1 - 5 + 4m^2 - 2m^2 + 8m^2 - 3$

10. $5 - 2b^2 + 3b^2 + 9b + 2b^2 + 9b^2 - 4b$

Simplifying Quadratic Expressions (D) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & -2p + p^2 + 6p^2 + 6p^2 - 2p - 8 - 8p^2 \\ & = 5p^2 - 4p - 8 \end{aligned}$$

$$\begin{aligned} 2. & f - 7f - 6f^2 - 7f^2 + 7f^2 + 5 + 4f^2 \\ & = -2f^2 - 6f + 5 \end{aligned}$$

$$\begin{aligned} 3. & 7 + 3 - 8s - 6 - 2s^2 + 7s^2 + 3s^2 \\ & = 8s^2 - 8s + 4 \end{aligned}$$

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

$$\begin{aligned} 5. & 2n^2 - n^2 - 3n^2 + 5n - 8n^2 + 9 - 3n^2 \\ & = -13n^2 + 5n + 9 \end{aligned}$$

$$\begin{aligned} 6. & 3p - 5 - 9p + 3p^2 - 8p - p^2 - 3p \\ & = 2p^2 - 17p - 5 \end{aligned}$$

$$\begin{aligned} 7. & -8a^2 - 2a^2 + 1 - 7 + 2a^2 - 8a^2 + 6a^2 \\ & = -10a^2 - 6 \end{aligned}$$

$$\begin{aligned} 8. & 8p^2 - 9p^2 - 1 - 9 - 3p + 4 - 3p \\ & = -p^2 - 6p - 6 \end{aligned}$$

$$\begin{aligned} 9. & -3 + 1 - 5 + 4m^2 - 2m^2 + 8m^2 - 3 \\ & = 10m^2 - 10 \end{aligned}$$

$$\begin{aligned} 10. & 5 - 2b^2 + 3b^2 + 9b + 2b^2 + 9b^2 - 4b \\ & = 12b^2 + 5b + 5 \end{aligned}$$