

Simplifying Quadratic Expressions (A)

Simplify each expression by combining like terms.

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

2. $6t^2 - 4 + 7t^2 + 1 + 5t$

3. $4 + 7a^2 - 3a^2 + 5a + a$

4. $-9d + 3 + 7d^2 - 3 - 9d$

5. $6 + 9h - 6h^2 + 5h^2 + 8h^2$

6. $-9p^2 - 9p^2 - 2p^2 - 2 - 5p$

7. $1 - 6 + 4 + 4 - 7f^2$

8. $2s^2 - 4s^2 + 4s - 8s^2 - 7s^2$

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

10. $-8 + 7 - 3q^2 - 3q + 5q^2$

Simplifying Quadratic Expressions (A) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & -3v^2 + 9 + 5v^2 - 9v^2 + 8 \\ & = -7v^2 + 17 \end{aligned}$$

$$\begin{aligned} 2. & 6t^2 - 4 + 7t^2 + 1 + 5t \\ & = 13t^2 + 5t - 3 \end{aligned}$$

$$\begin{aligned} 3. & 4 + 7a^2 - 3a^2 + 5a + a \\ & = 4a^2 + 6a + 4 \end{aligned}$$

$$\begin{aligned} 4. & -9d + 3 + 7d^2 - 3 - 9d \\ & = 7d^2 - 18d \end{aligned}$$

$$\begin{aligned} 5. & 6 + 9h - 6h^2 + 5h^2 + 8h^2 \\ & = 7h^2 + 9h + 6 \end{aligned}$$

$$\begin{aligned} 6. & -9p^2 - 9p^2 - 2p^2 - 2 - 5p \\ & = -20p^2 - 5p - 2 \end{aligned}$$

$$\begin{aligned} 7. & 1 - 6 + 4 + 4 - 7f^2 \\ & = -7f^2 + 3 \end{aligned}$$

$$\begin{aligned} 8. & 2s^2 - 4s^2 + 4s - 8s^2 - 7s^2 \\ & = -17s^2 + 4s \end{aligned}$$

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

$$\begin{aligned} 10. & -8 + 7 - 3q^2 - 3q + 5q^2 \\ & = 2q^2 - 3q - 1 \end{aligned}$$