

Simplifying Quadratic Expressions (B)

Simplify each expression by combining like terms.

1. $5t^2 - 2t + 2t - 2t^2 - 8t^2$

2. $4 + z^2 - 6z - 9 - 4$

3. $-1 - 9 + 1 - 6k + 9k^2$

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

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

6. $4q^2 + 6q^2 - 7q + 6q^2 + 5 + q^2 + 9q - 3q^2 - 5q^2$

7. $-8s^2 - s + 5s^2 + s - 5 + 9 + 2 - 5s$

8. $6r^2 - 2r^2 + 4 - 9r^2 - 9r^2 + 8$

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

10. $9k + 9k^2 + 2 + 8k^2 - 5$

Simplifying Quadratic Expressions (B) Answers

Simplify each expression by combining like terms.

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

$$\begin{aligned} 2. & 4 + z^2 - 6z - 9 - 4 \\ & = z^2 - 6z - 9 \end{aligned}$$

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

$$\begin{aligned} 4. & -7 - 5q - 6 + 3q^2 + 7q^2 - q^2 - 6 + 2q^2 - 6 \\ & = 11q^2 - 5q - 25 \end{aligned}$$

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

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

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

$$\begin{aligned} 8. & 6r^2 - 2r^2 + 4 - 9r^2 - 9r^2 + 8 \\ & = -14r^2 + 12 \end{aligned}$$

$$\begin{aligned} 9. & 9d + 7d^2 - 1 + d^2 - d \\ & = 8d^2 + 8d - 1 \end{aligned}$$

$$\begin{aligned} 10. & 9k + 9k^2 + 2 + 8k^2 - 5 \\ & = 17k^2 + 9k - 3 \end{aligned}$$