

# Simplifying Quadratic Expressions (J)

Simplify each expression by combining like terms.

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

2.  $-h - 3h^2 - 7h + 7h^2 - h^2$

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

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

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

6.  $4b^2 + 3b^2 + 1 - 2 - 3b$

7.  $2f - 2 + 2f^2 + 7f + f^2$

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

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

10.  $6c + c^2 + 7c - 4c^2 + 6c$

# Simplifying Quadratic Expressions (J) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & -9w + 5 - 6w^2 + 6w - 9w^2 \\ & = -15w^2 - 3w + 5 \end{aligned}$$

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

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

$$\begin{aligned} 4. & -8d^2 - 4d^2 - 3d^2 + 3 + 3 \\ & = -15d^2 + 6 \end{aligned}$$

$$\begin{aligned} 5. & 8m - 3m + 9m + 2m^2 - 9m^2 \\ & = -7m^2 + 14m \end{aligned}$$

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

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

$$\begin{aligned} 8. & -4p^2 - 4p + 7p - p^2 + 2p \\ & = -5p^2 + 5p \end{aligned}$$

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

$$\begin{aligned} 10. & 6c + c^2 + 7c - 4c^2 + 6c \\ & = -3c^2 + 19c \end{aligned}$$