

# Simplifying Quadratic Expressions (J)

Simplify each expression by combining like terms.

1.  $-3g^2 + 2 - g + 2 + 3 + 5g^2$

2.  $-4f^2 + 3f - 8f^2 + 3 + 6f - 3f^2$

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

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

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

6.  $8x^2 - 2 - 5x^2 + 8 + 8 - 3x^2$

7.  $-8c^2 - 7 + 4 + c^2 + 3 + 4c^2$

8.  $-2v + 5v^2 - v + 7v^2 - 9 - 6v^2$

9.  $6 - 4h + 5h + 9h^2 - 2h^2 + 6h^2$

10.  $-5x^2 - 1 - 7 + 3x^2 + 3x^2 - 6x^2$

# Simplifying Quadratic Expressions (J) Answers

Simplify each expression by combining like terms.

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

$$\begin{aligned} 2. & -4f^2 + 3f - 8f^2 + 3 + 6f - 3f^2 \\ & = -15f^2 + 9f + 3 \end{aligned}$$

$$\begin{aligned} 3. & 5 + 2p^2 + 5p^2 + 5 - 5p^2 - 6p^2 \\ & = -4p^2 + 10 \end{aligned}$$

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

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

$$\begin{aligned} 6. & 8x^2 - 2 - 5x^2 + 8 + 8 - 3x^2 \\ & = 14 \end{aligned}$$

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

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

$$\begin{aligned} 9. & 6 - 4h + 5h + 9h^2 - 2h^2 + 6h^2 \\ & = 13h^2 + h + 6 \end{aligned}$$

$$\begin{aligned} 10. & -5x^2 - 1 - 7 + 3x^2 + 3x^2 - 6x^2 \\ & = -5x^2 - 8 \end{aligned}$$