

## Simplifying Quadratic Expressions (C)

Simplify each expression by combining like terms.

1.  $-3 - 7g - g^2 - 5 + 2g + 9g + 2g + 9 + 6g$

2.  $1 - 9f^2 - 1 + 7f^2 + f - 3$

3.  $-6f^2 + 9 + 3f^2 + 6f^2 + 3 + 2 + f - 7f^2 - 8f - 8f^2$

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

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

6.  $2 - 7y^2 + 4y^2 - 7y - 8y^2 + 3y - 7 + 8$

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

8.  $-7 - 8 - 5 + 4r^2 - 5r^2 + 4r + 5r^2$

9.  $5z - 8 + 9z^2 + 3 + 7$

10.  $-g^2 + 5g + 4g + 8 - 5g^2 - 9g - 8g^2$

# Simplifying Quadratic Expressions (C) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & -3 - 7g - g^2 - 5 + 2g + 9g + 2g + 9 + 6g \\ & = -g^2 + 12g + 1 \end{aligned}$$

$$\begin{aligned} 2. & 1 - 9f^2 - 1 + 7f^2 + f - 3 \\ & = -2f^2 + f - 3 \end{aligned}$$

$$\begin{aligned} 3. & -6f^2 + 9 + 3f^2 + 6f^2 + 3 + 2 + f - 7f^2 - 8f - 8f^2 \\ & = -12f^2 - 7f + 14 \end{aligned}$$

$$\begin{aligned} 4. & 6p^2 - 8p^2 - 6 + 6p - 3p - 8p \\ & = -2p^2 - 5p - 6 \end{aligned}$$

$$\begin{aligned} 5. & -8y^2 - 7y^2 - 7y^2 - 8 - 9y^2 + 7y^2 - 7y^2 + 6y \\ & = -31y^2 + 6y - 8 \end{aligned}$$

$$\begin{aligned} 6. & 2 - 7y^2 + 4y^2 - 7y - 8y^2 + 3y - 7 + 8 \\ & = -11y^2 - 4y + 3 \end{aligned}$$

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

$$\begin{aligned} 8. & -7 - 8 - 5 + 4r^2 - 5r^2 + 4r + 5r^2 \\ & = 4r^2 + 4r - 20 \end{aligned}$$

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

$$\begin{aligned} 10. & -g^2 + 5g + 4g + 8 - 5g^2 - 9g - 8g^2 \\ & = -14g^2 + 8 \end{aligned}$$