

Simplifying Quadratic Expressions (A)

Simplify each expression by combining like terms.

1. $-5 - 5d^2 + 4d^2 + 9d^2 + 7$

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

3. $-4 - 5b^2 - 1 - 2b - 6b^2$

4. $-2c^2 - 4 - 2 - 4c^2 + 5c - 1$

5. $8 - 7r + r^2 + 1 - 3r^2 - 8r$

6. $8 - 5x^2 + 9x - 1 - 4 - 2x^2 - 7x + x - 8x + 7x^2$

7. $4g - 4 - 3g^2 + 4g - 2 - g^2$

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

9. $-3 - 5p - 6p^2 - 8p^2 + 8p - 1 + 2 - 3$

10. $6s^2 - 2s^2 - 8s + 7 + 3 - 4 - 5 - 5 + 8s$

Simplifying Quadratic Expressions (A) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & -5 - 5d^2 + 4d^2 + 9d^2 + 7 \\ & = 8d^2 + 2 \end{aligned}$$

$$\begin{aligned} 2. & -8b - 9 - 8b + 5b^2 - 8b^2 + 2b^2 + 6 + 5b \\ & = -b^2 - 11b - 3 \end{aligned}$$

$$\begin{aligned} 3. & -4 - 5b^2 - 1 - 2b - 6b^2 \\ & = -11b^2 - 2b - 5 \end{aligned}$$

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

$$\begin{aligned} 5. & 8 - 7r + r^2 + 1 - 3r^2 - 8r \\ & = -2r^2 - 15r + 9 \end{aligned}$$

$$\begin{aligned} 6. & 8 - 5x^2 + 9x - 1 - 4 - 2x^2 - 7x + x - 8x + 7x^2 \\ & = -5x + 3 \end{aligned}$$

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

$$\begin{aligned} 8. & -3f - 2f^2 - 9f^2 + 3f + 9f - 5f \\ & = -11f^2 + 4f \end{aligned}$$

$$\begin{aligned} 9. & -3 - 5p - 6p^2 - 8p^2 + 8p - 1 + 2 - 3 \\ & = -14p^2 + 3p - 5 \end{aligned}$$

$$\begin{aligned} 10. & 6s^2 - 2s^2 - 8s + 7 + 3 - 4 - 5 - 5 + 8s \\ & = 4s^2 - 4 \end{aligned}$$