

Simplifying Quadratic Expressions (A)

Simplify each expression by combining like terms.

1. $-5t^2 + 3t^2 - 9t + 4 + 8t^2 + t$

2. $8q^2 + 6 - 5q + 2 - 8 + 5q^2$

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

4. $6 + 7m^2 + 5 - 6m - 6m^2 - 8$

5. $7w^2 + w - 2w + 3w - 8 + 2$

6. $-9n^2 - 9 + 4 - 4n^2 - 1 + 3$

7. $8b^2 - 4 - 6 - 6 - 5b - 8b^2$

8. $-6 - 7n^2 + 3n^2 - 6n^2 - 8n^2 + 6n^2$

9. $-6t^2 + 7t^2 - 5t^2 - 3t^2 + 5t + 8t^2$

10. $-9 + 3t^2 - 2t^2 - 3t^2 + 8t^2 + 8t$

Simplifying Quadratic Expressions (A) Answers

Simplify each expression by combining like terms.

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

$$\begin{aligned} 2. & 8q^2 + 6 - 5q + 2 - 8 + 5q^2 \\ & = 13q^2 - 5q \end{aligned}$$

$$\begin{aligned} 3. & 4f - 7f^2 + 9 - 5f + 6 - 6f \\ & = -7f^2 - 7f + 15 \end{aligned}$$

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

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

$$\begin{aligned} 6. & -9n^2 - 9 + 4 - 4n^2 - 1 + 3 \\ & = -13n^2 - 3 \end{aligned}$$

$$\begin{aligned} 7. & 8b^2 - 4 - 6 - 6 - 5b - 8b^2 \\ & = -5b - 16 \end{aligned}$$

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

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

$$\begin{aligned} 10. & -9 + 3t^2 - 2t^2 - 3t^2 + 8t^2 + 8t \\ & = 6t^2 + 8t - 9 \end{aligned}$$