

Simplifying Quadratic Expressions (F)

Simplify each expression by combining like terms.

1. $-8 - 3t^2 - 3 + 7t + 4t^2$

2. $m^2 + 9 - 6m^2 - m^2 - 9m^2$

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

4. $2b^2 + 2b^2 - 4 - 7b^2 + b$

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

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

7. $6 + 4q + 9q^2 + 8q^2 + 6q^2$

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

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

10. $-4 - 4n^2 - 4n^2 - 2n^2 + n$

Simplifying Quadratic Expressions (F) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & -8 - 3t^2 - 3 + 7t + 4t^2 \\ & = t^2 + 7t - 11 \end{aligned}$$

$$\begin{aligned} 2. & m^2 + 9 - 6m^2 - m^2 - 9m^2 \\ & = -15m^2 + 9 \end{aligned}$$

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

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

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

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

$$\begin{aligned} 7. & 6 + 4q + 9q^2 + 8q^2 + 6q^2 \\ & = 23q^2 + 4q + 6 \end{aligned}$$

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

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

$$\begin{aligned} 10. & -4 - 4n^2 - 4n^2 - 2n^2 + n \\ & = -10n^2 + n - 4 \end{aligned}$$