

Simplifying Quadratic Expressions (F)

Simplify each expression by combining like terms.

1. $-8m + 9m^2 - 3 + 9m^2 - 6 - 7 + 4$

2. $3f^2 - 2 + 8f + 3f - 8 + 5f - 4f^2$

3. $3s^2 + 5s^2 - 1 + 8s + 4s^2 - 6s^2 + 9s$

4. $9q - 5q - 1 + 2q^2 + 2q^2 + 9q^2 - 5q$

5. $-4c - 9 - 2c^2 - 6c - 3c^2 - 5 + 4c^2$

6. $-7k^2 + 6k^2 - 7k^2 + 7k^2 - 5k^2 - 3k + 7k^2$

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

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

9. $2r^2 + 6 + 4 + 4r + 7r - 9r^2 + 1$

10. $-4t - 5 + 8t - 9 - 4t^2 + 4t - 7$

Simplifying Quadratic Expressions (F) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & -8m + 9m^2 - 3 + 9m^2 - 6 - 7 + 4 \\ & = 18m^2 - 8m - 12 \end{aligned}$$

$$\begin{aligned} 2. & 3f^2 - 2 + 8f + 3f - 8 + 5f - 4f^2 \\ & = -f^2 + 16f - 10 \end{aligned}$$

$$\begin{aligned} 3. & 3s^2 + 5s^2 - 1 + 8s + 4s^2 - 6s^2 + 9s \\ & = 6s^2 + 17s - 1 \end{aligned}$$

$$\begin{aligned} 4. & 9q - 5q - 1 + 2q^2 + 2q^2 + 9q^2 - 5q \\ & = 13q^2 - q - 1 \end{aligned}$$

$$\begin{aligned} 5. & -4c - 9 - 2c^2 - 6c - 3c^2 - 5 + 4c^2 \\ & = -c^2 - 10c - 14 \end{aligned}$$

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

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

$$\begin{aligned} 8. & -2j^2 + 9j + 7j + j - 9j^2 - 2j - 9j^2 \\ & = -20j^2 + 15j \end{aligned}$$

$$\begin{aligned} 9. & 2r^2 + 6 + 4 + 4r + 7r - 9r^2 + 1 \\ & = -7r^2 + 11r + 11 \end{aligned}$$

$$\begin{aligned} 10. & -4t - 5 + 8t - 9 - 4t^2 + 4t - 7 \\ & = -4t^2 + 8t - 21 \end{aligned}$$