

Simplifying Quadratic Expressions (I)

Simplify each expression by combining like terms.

1. $6t^2 - 1 - 4t^2 - 5 - t - 3t^2 + 7t$

2. $-8p^2 + 2 + 7 - 4p^2 + 8 + 3p - 9p^2 - 5 - 3p^2 + 9p$

3. $8s + 2s^2 - 1 + 2s - 3s - 9$

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

5. $-2y - 8 - 9y^2 - 3 - 3y^2$

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

7. $2q^2 - 9q + 2q^2 + 2q^2 - 1 + 5q - 3 - 2$

8. $-6t^2 - 9t + t^2 + 1 + 9t^2 + 4$

9. $-3y - 2y^2 + 5y - 7 - y^2 - 4y^2 + 5 + y^2 - 9$

10. $2n - 5n^2 + 8n + n^2 - 2n - 4n + 5n + 1 + n - 6$

Simplifying Quadratic Expressions (I) Answers

Simplify each expression by combining like terms.

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

$$\begin{aligned} 2. & -8p^2 + 2 + 7 - 4p^2 + 8 + 3p - 9p^2 - 5 - 3p^2 + 9p \\ & = -24p^2 + 12p + 12 \end{aligned}$$

$$\begin{aligned} 3. & 8s + 2s^2 - 1 + 2s - 3s - 9 \\ & = 2s^2 + 7s - 10 \end{aligned}$$

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

$$\begin{aligned} 5. & -2y - 8 - 9y^2 - 3 - 3y^2 \\ & = -12y^2 - 2y - 11 \end{aligned}$$

$$\begin{aligned} 6. & -1 + 1 - 4d^2 + 4 - 9d^2 + 6d - 5d + 9d + 8 \\ & = -13d^2 + 10d + 12 \end{aligned}$$

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

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

$$\begin{aligned} 9. & -3y - 2y^2 + 5y - 7 - y^2 - 4y^2 + 5 + y^2 - 9 \\ & = -6y^2 + 2y - 11 \end{aligned}$$

$$\begin{aligned} 10. & 2n - 5n^2 + 8n + n^2 - 2n - 4n + 5n + 1 + n - 6 \\ & = -4n^2 + 10n - 5 \end{aligned}$$