

Simplifying Quadratic Expressions (I)

Simplify each expression by combining like terms.

1. $8y^2 + y - 8y + 6y + 8y + 3 + 6y$

2. $-5g + 3g + 1 + 4g - 5g + 4g^2 - 4g^2$

3. $8z + 9z^2 + z^2 + 8 - 7 - 3z^2 + 1$

4. $-7 + 6n^2 + 1 - 7 - 6n^2 + 3n + n^2$

5. $-3r^2 - 7r - r^2 - 6r^2 - r^2 + 2r + 8$

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

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

8. $-9r + 9r + 1 - 5r^2 - 8r^2 + r^2 + 5r$

9. $3w + 1 + 8 + 2w - 3w^2 + 9w - 5w^2$

10. $1 + 5m + 6m^2 - 5m^2 + 7m^2 - 7m^2 + 7$

Simplifying Quadratic Expressions (I) Answers

Simplify each expression by combining like terms.

$$\begin{aligned} 1. & 8y^2 + y - 8y + 6y + 8y + 3 + 6y \\ & = 8y^2 + 13y + 3 \end{aligned}$$

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

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

$$\begin{aligned} 4. & -7 + 6n^2 + 1 - 7 - 6n^2 + 3n + n^2 \\ & = n^2 + 3n - 13 \end{aligned}$$

$$\begin{aligned} 5. & -3r^2 - 7r - r^2 - 6r^2 - r^2 + 2r + 8 \\ & = -11r^2 - 5r + 8 \end{aligned}$$

$$\begin{aligned} 6. & 2m^2 + 2m^2 + 4m^2 + 5m^2 + 4m^2 + 8m - 7m \\ & = 17m^2 + m \end{aligned}$$

$$\begin{aligned} 7. & -9m^2 - 3m^2 - 7m - 6m^2 + 6m^2 - 6 - 4m^2 \\ & = -16m^2 - 7m - 6 \end{aligned}$$

$$\begin{aligned} 8. & -9r + 9r + 1 - 5r^2 - 8r^2 + r^2 + 5r \\ & = -12r^2 + 5r + 1 \end{aligned}$$

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

$$\begin{aligned} 10. & 1 + 5m + 6m^2 - 5m^2 + 7m^2 - 7m^2 + 7 \\ & = m^2 + 5m + 8 \end{aligned}$$