Simplifying Quadratic Expressions (I)

Simplify each expression by combining like terms.

1. $6z^2 - 3 - 6z^2 + 7 + 9z - 5z^2 - 5z^2 - 2z^2 + 5z^2$

2. $-8p^2 + 3p^2 - 7 - 5p - 4 - 8p^2 + 9p^2 + 6 + 6p$

3. $7s^2 - 3 - 6s + 9s^2 - 9s - 7s + 9s + 1 + 9$

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

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

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

7. $-7 - 6y^2 - 5y^2 + 8y - 9y^2 - 2y + 5 + 2y - 5y$

8. $7 - 6n - 1 - 7n^2 - 2 - 5n^2 + 6n^2 + 8n + n^2$

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

10. $-7x - 3x^2 - 5x^2 - 8x + 2 + 2x + x + 2 + 3x^2$

Simplifying Quadratic Expressions (I) Answers

Simplify each expression by combining like terms.

1. $6z^2 - 3 - 6z^2 + 7 + 9z - 5z^2 - 5z^2 - 2z^2 + 5z^2$
   $= -7z^2 + 9z + 4$

2. $-8p^2 + 3p^2 - 7 - 5p - 4 - 8p^2 + 9p^2 + 6 + 6p$
   $= -4p^2 + p - 5$

3. $7s^2 - 3 - 6s + 9s^2 - 9s - 7s + 9s + 1 + 9$
   $= 16s^2 - 13s + 7$

4. $-2r - 6r^2 - 9r^2 + 5r^2 - 4r + 4r - 3 - 6r^2 - 6$
   $= -16r^2 - 2r - 9$

5. $3 + 6g^2 - 9g - 4g^2 - 8 + 4 - g + 2g^2 - 2$
   $= 4g^2 - 10g - 3$

6. $2 - 1 - 2h + 6h^2 + 9h - 3h + 4h^2 + 9h + 4h^2$
   $= 14h^2 + 13h + 1$

7. $-7 - 6y^2 - 5y^2 + 8y - 9y^2 - 2y + 5 + 2y - 5y$
   $= -20y^2 + 3y - 2$

8. $7 - 6n - 1 - 7n^2 - 2 - 5n^2 + 6n^2 + 8n + n^2$
   $= -5n^2 + 2n + 4$

9. $-7 + 4x^2 - 6x - x^2 + 6 + 3x^2 + 5x^2 + 3 + 9x$
   $= 11x^2 + 3x + 2$

10. $-7x - 3x^2 - 5x^2 - 8x + 2 + 2x + x + 2 + 3x^2$
    $= -5x^2 - 12x + 4$