

Adding & Subtracting Quadratic Expressions (A)

Simplify each expression.

1. $(-7g^2 + 6g - 8) - (5g^2 - 2g + 4)$

2. $(7b^2 + 3b + 7) + (3b^2 - 6b - 8)$

3. $(6k^2 - 3k + 8) - (-k^2 - 2k - 9)$

4. $(6v^2 - v - 1) + (-4v^2 - 9v + 9)$

5. $(4p^2 + 2p + 9) + (-5p^2 - 5p - 2)$

6. $(-9f^2 - f - 7) + (6f^2 + f - 5)$

7. $(8q^2 - 7q - 1) + (-6q^2 + 8q + 7)$

8. $(-8c^2 - 9c + 9) + (-5c^2 - 8c - 6)$

9. $(9r^2 - 5r - 7) + (8r^2 + 8r + 6)$

10. $(4k^2 - 9k - 8) + (-3k^2 + 8k + 2)$

Adding & Subtracting Quadratic Expressions (A) Answers

Simplify each expression.

1. $(-7g^2 + 6g - 8) - (5g^2 - 2g + 4)$
 $-12g^2 + 8g - 12$

2. $(7b^2 + 3b + 7) + (3b^2 - 6b - 8)$
 $10b^2 - 3b - 1$

3. $(6k^2 - 3k + 8) - (-k^2 - 2k - 9)$
 $7k^2 - k + 17$

4. $(6v^2 - v - 1) + (-4v^2 - 9v + 9)$
 $2v^2 - 10v + 8$

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

6. $(-9f^2 - f - 7) + (6f^2 + f - 5)$
 $-3f^2 - 12$

7. $(8q^2 - 7q - 1) + (-6q^2 + 8q + 7)$
 $2q^2 + q + 6$

8. $(-8c^2 - 9c + 9) + (-5c^2 - 8c - 6)$
 $-13c^2 - 17c + 3$

9. $(9r^2 - 5r - 7) + (8r^2 + 8r + 6)$
 $17r^2 + 3r - 1$

10. $(4k^2 - 9k - 8) + (-3k^2 + 8k + 2)$
 $k^2 - k - 6$

Adding & Subtracting Quadratic Expressions (B)

Simplify each expression.

1. $(-3w^2 + 5w - 2) + (-9w^2 + 4w + 5)$

2. $(9z^2 + 9z + 6) + (z^2 + 4z + 7)$

3. $(-5g^2 + 9g - 3) + (2g^2 - 6g + 3)$

4. $(3q^2 + 6q - 2) - (-3q^2 - 8q + 2)$

5. $(-4z^2 + 4z + 7) - (-9z^2 + z - 7)$

6. $(6w^2 + 9w + 9) - (7w^2 + 6w + 5)$

7. $(5p^2 - 3p + 3) - (-3p^2 + 5p + 7)$

8. $(2q^2 + 8q + 5) - (-5q^2 + 8)$

9. $(-2t^2 - t - 2) - (8t^2 + 6t - 3)$

10. $(9r^2 - 6r + 1) - (-6r^2 + 2r - 1)$

Adding & Subtracting Quadratic Expressions (B) Answers

Simplify each expression.

1. $(-3w^2 + 5w - 2) + (-9w^2 + 4w + 5)$
 $-12w^2 + 9w + 3$

2. $(9z^2 + 9z + 6) + (z^2 + 4z + 7)$
 $10z^2 + 13z + 13$

3. $(-5g^2 + 9g - 3) + (2g^2 - 6g + 3)$
 $-3g^2 + 3g$

4. $(3q^2 + 6q - 2) - (-3q^2 - 8q + 2)$
 $6q^2 + 14q - 4$

5. $(-4z^2 + 4z + 7) - (-9z^2 + z - 7)$
 $5z^2 + 3z + 14$

6. $(6w^2 + 9w + 9) - (7w^2 + 6w + 5)$
 $-w^2 + 3w + 4$

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

8. $(2q^2 + 8q + 5) - (-5q^2 + 8)$
 $7q^2 + 8q - 3$

9. $(-2t^2 - t - 2) - (8t^2 + 6t - 3)$
 $-10t^2 - 7t + 1$

10. $(9r^2 - 6r + 1) - (-6r^2 + 2r - 1)$
 $15r^2 - 8r + 2$

Adding & Subtracting Quadratic Expressions (C)

Simplify each expression.

1. $(2s^2 + 9s + 5) + (5s^2 + 7s + 7)$

2. $(-6b^2 + 2b - 7) + (6b^2 - b + 5)$

3. $(9y^2 + 6y - 3) - (3y^2 + y + 8)$

4. $(-5h^2 + 9h + 1) - (-8h^2 - 8)$

5. $(5n^2 - 5n - 1) + (-4n^2 - n - 7)$

6. $(6d^2 - 3d + 2) + (d^2 - 4d - 4)$

7. $(-6y^2 + 9y - 2) - (9y^2 + 3y - 3)$

8. $(-6n^2 + 6n + 8) + (7n^2 + n - 2)$

9. $(v^2 + 6v - 2) - (-9v^2 + 4v - 9)$

10. $(-2f^2 - 4f - 7) + (6f^2 - 3f + 8)$

Adding & Subtracting Quadratic Expressions (C) Answers

Simplify each expression.

1. $(2s^2 + 9s + 5) + (5s^2 + 7s + 7)$
 $7s^2 + 16s + 12$

2. $(-6b^2 + 2b - 7) + (6b^2 - b + 5)$
 $b - 2$

3. $(9y^2 + 6y - 3) - (3y^2 + y + 8)$
 $6y^2 + 5y - 11$

4. $(-5h^2 + 9h + 1) - (-8h^2 - 8)$
 $3h^2 + 9h + 9$

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

6. $(6d^2 - 3d + 2) + (d^2 - 4d - 4)$
 $7d^2 - 7d - 2$

7. $(-6y^2 + 9y - 2) - (9y^2 + 3y - 3)$
 $-15y^2 + 6y + 1$

8. $(-6n^2 + 6n + 8) + (7n^2 + n - 2)$
 $n^2 + 7n + 6$

9. $(v^2 + 6v - 2) - (-9v^2 + 4v - 9)$
 $10v^2 + 2v + 7$

10. $(-2f^2 - 4f - 7) + (6f^2 - 3f + 8)$
 $4f^2 - 7f + 1$

Adding & Subtracting Quadratic Expressions (D)

Simplify each expression.

1. $(2h^2 - 5h - 8) - (-2h^2 - 7h - 8)$

2. $(-7q^2 - 3q + 9) + (6q^2 + q - 3)$

3. $(3p^2 + 5p - 9) + (5p^2 - 7p - 1)$

4. $(-2z^2 - 5z + 6) + (3z^2 - 2z + 6)$

5. $(-k^2 - 7k - 4) + (-9k^2 + 7k + 9)$

6. $(2w^2 - 3w - 2) + (w^2 - w + 9)$

7. $(q^2 - 3q + 4) - (9q^2 - 6q - 9)$

8. $(9y^2 + 8y - 7) + (-7y^2 + y - 9)$

9. $(9m^2 + m + 4) - (-8m^2 - 9m + 2)$

10. $(-2c^2 - c - 4) - (8c^2 - 8c + 2)$

Adding & Subtracting Quadratic Expressions (D) Answers

Simplify each expression.

1. $(2h^2 - 5h - 8) - (-2h^2 - 7h - 8)$
 $4h^2 + 2h$

2. $(-7q^2 - 3q + 9) + (6q^2 + q - 3)$
 $-q^2 - 2q + 6$

3. $(3p^2 + 5p - 9) + (5p^2 - 7p - 1)$
 $8p^2 - 2p - 10$

4. $(-2z^2 - 5z + 6) + (3z^2 - 2z + 6)$
 $z^2 - 7z + 12$

5. $(-k^2 - 7k - 4) + (-9k^2 + 7k + 9)$
 $-10k^2 + 5$

6. $(2w^2 - 3w - 2) + (w^2 - w + 9)$
 $3w^2 - 4w + 7$

7. $(q^2 - 3q + 4) - (9q^2 - 6q - 9)$
 $-8q^2 + 3q + 13$

8. $(9y^2 + 8y - 7) + (-7y^2 + y - 9)$
 $2y^2 + 9y - 16$

9. $(9m^2 + m + 4) - (-8m^2 - 9m + 2)$
 $17m^2 + 10m + 2$

10. $(-2c^2 - c - 4) - (8c^2 - 8c + 2)$
 $-10c^2 + 7c - 6$

Adding & Subtracting Quadratic Expressions (E)

Simplify each expression.

1. $(4n^2 - 4n + 7) - (n^2 - 2n + 3)$

2. $(-z^2 + 8z + 4) + (-8z^2 + 6)$

3. $(7q^2 + 2q - 6) + (9q^2 - 2q + 7)$

4. $(p^2 - 3p - 6) + (-8p^2 + 4p - 3)$

5. $(7f^2 - 5f + 6) - (-8f^2 + 4f + 4)$

6. $(6d^2 - 7d + 3) - (4d^2 - 2d + 7)$

7. $(6n^2 - 9n) + (4n^2 + 7n + 7)$

8. $(-2v^2 + 6v - 3) - (2v^2 + 7v + 7)$

9. $(-7t^2 - t + 8) - (t^2 + 2t - 9)$

10. $(-7y^2 + y - 3) - (-3y^2 - 6y - 4)$

Adding & Subtracting Quadratic Expressions (E) Answers

Simplify each expression.

1. $(4n^2 - 4n + 7) - (n^2 - 2n + 3)$
 $3n^2 - 2n + 4$

2. $(-z^2 + 8z + 4) + (-8z^2 + 6)$
 $-9z^2 + 8z + 10$

3. $(7q^2 + 2q - 6) + (9q^2 - 2q + 7)$
 $16q^2 + 1$

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

5. $(7f^2 - 5f + 6) - (-8f^2 + 4f + 4)$
 $15f^2 - 9f + 2$

6. $(6d^2 - 7d + 3) - (4d^2 - 2d + 7)$
 $2d^2 - 5d - 4$

7. $(6n^2 - 9n) + (4n^2 + 7n + 7)$
 $10n^2 - 2n + 7$

8. $(-2v^2 + 6v - 3) - (2v^2 + 7v + 7)$
 $-4v^2 - v - 10$

9. $(-7t^2 - t + 8) - (t^2 + 2t - 9)$
 $-8t^2 - 3t + 17$

10. $(-7y^2 + y - 3) - (-3y^2 - 6y - 4)$
 $-4y^2 + 7y + 1$

Adding & Subtracting Quadratic Expressions (F)

Simplify each expression.

1. $(-5g^2 + 5g + 8) + (-4g^2 + 5g + 2)$

2. $(6q^2 - 8q + 8) + (8q^2 + 3q + 3)$

3. $(6z^2 - 8z + 1) + (-7z^2 - 7z + 2)$

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

5. $(-8t^2 - 4t - 6) - (-3t^2 - 2t - 5)$

6. $(-3q^2 + 9q - 4) - (9q + 4)$

7. $(8k^2 + 2k - 9) - (-9k^2 + 4k - 2)$

8. $(9z^2 - 6z + 7) + (-8z^2 + 5z - 5)$

9. $(2x^2 + 3x - 7) + (-4x^2 + 7x - 1)$

10. $(-3b^2 + 5b - 7) + (-9b^2 - 4b - 9)$

Adding & Subtracting Quadratic Expressions (F) Answers

Simplify each expression.

1. $(-5g^2 + 5g + 8) + (-4g^2 + 5g + 2)$
 $-9g^2 + 10g + 10$

2. $(6q^2 - 8q + 8) + (8q^2 + 3q + 3)$
 $14q^2 - 5q + 11$

3. $(6z^2 - 8z + 1) + (-7z^2 - 7z + 2)$
 $-z^2 - 15z + 3$

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

5. $(-8t^2 - 4t - 6) - (-3t^2 - 2t - 5)$
 $-5t^2 - 2t - 1$

6. $(-3q^2 + 9q - 4) - (9q + 4)$
 $-3q^2 - 8$

7. $(8k^2 + 2k - 9) - (-9k^2 + 4k - 2)$
 $17k^2 - 2k - 7$

8. $(9z^2 - 6z + 7) + (-8z^2 + 5z - 5)$
 $z^2 - z + 2$

9. $(2x^2 + 3x - 7) + (-4x^2 + 7x - 1)$
 $-2x^2 + 10x - 8$

10. $(-3b^2 + 5b - 7) + (-9b^2 - 4b - 9)$
 $-12b^2 + b - 16$

Adding & Subtracting Quadratic Expressions (G)

Simplify each expression.

1. $(-2b^2 + 9b + 3) + (-b + 4)$

2. $(6x^2 - x - 6) - (4x^2 - 9x - 9)$

3. $(-5b^2 - 4b + 6) + (6b^2 + 9b - 5)$

4. $(7c^2 + 4c + 8) + (5c^2 + 2c + 2)$

5. $(7d^2 + 4d + 7) + (3d^2 + 4d - 6)$

6. $(-6q^2 - 2q + 6) + (-4q^2 + 2q + 8)$

7. $(-7g^2 + 2g - 5) + (-3g^2 - 3g + 7)$

8. $(-6s^2 + 2s - 1) - (5s^2 + 6s - 3)$

9. $(-4s^2 - 7s - 7) + (6s^2 - s + 1)$

10. $(2c^2 - 5c + 1) + (9c^2 + 8c - 5)$

Adding & Subtracting Quadratic Expressions (G) Answers

Simplify each expression.

1. $(-2b^2 + 9b + 3) + (-b + 4)$
 $-2b^2 + 8b + 7$

2. $(6x^2 - x - 6) - (4x^2 - 9x - 9)$
 $2x^2 + 8x + 3$

3. $(-5b^2 - 4b + 6) + (6b^2 + 9b - 5)$
 $b^2 + 5b + 1$

4. $(7c^2 + 4c + 8) + (5c^2 + 2c + 2)$
 $12c^2 + 6c + 10$

5. $(7d^2 + 4d + 7) + (3d^2 + 4d - 6)$
 $10d^2 + 8d + 1$

6. $(-6q^2 - 2q + 6) + (-4q^2 + 2q + 8)$
 $-10q^2 + 14$

7. $(-7g^2 + 2g - 5) + (-3g^2 - 3g + 7)$
 $-10g^2 - g + 2$

8. $(-6s^2 + 2s - 1) - (5s^2 + 6s - 3)$
 $-11s^2 - 4s + 2$

9. $(-4s^2 - 7s - 7) + (6s^2 - s + 1)$
 $2s^2 - 8s - 6$

10. $(2c^2 - 5c + 1) + (9c^2 + 8c - 5)$
 $11c^2 + 3c - 4$

Adding & Subtracting Quadratic Expressions (H)

Simplify each expression.

1. $(-8z^2 + 5z) - (-2z^2 + 6z + 3)$

2. $(-6m^2 + 6m) + (-7m^2 + 9m + 2)$

3. $(-3r^2 + 7r + 8) + (9r^2 - r + 4)$

4. $(9m^2 - 3m + 3) - (9m^2 + 8m + 9)$

5. $(9m^2 - 3m + 9) + (-8m^2 + 9m - 1)$

6. $(4z^2 - 3z + 1) - (5z^2 - 5z + 5)$

7. $(-8m + 3) + (-9m^2 + 5m - 9)$

8. $(-s^2 - 3s - 8) - (-4s^2 - 4s + 4)$

9. $(4p^2 + p + 8) + (p^2 - 4p - 5)$

10. $(4w^2 + 6w + 5) - (3w^2 - w + 5)$

Adding & Subtracting Quadratic Expressions (H) Answers

Simplify each expression.

1. $(-8z^2 + 5z) - (-2z^2 + 6z + 3)$
 $-6z^2 - z - 3$

2. $(-6m^2 + 6m) + (-7m^2 + 9m + 2)$
 $-13m^2 + 15m + 2$

3. $(-3r^2 + 7r + 8) + (9r^2 - r + 4)$
 $6r^2 + 6r + 12$

4. $(9m^2 - 3m + 3) - (9m^2 + 8m + 9)$
 $-11m - 6$

5. $(9m^2 - 3m + 9) + (-8m^2 + 9m - 1)$
 $m^2 + 6m + 8$

6. $(4z^2 - 3z + 1) - (5z^2 - 5z + 5)$
 $-z^2 + 2z - 4$

7. $(-8m + 3) + (-9m^2 + 5m - 9)$
 $-9m^2 - 3m - 6$

8. $(-s^2 - 3s - 8) - (-4s^2 - 4s + 4)$
 $3s^2 + s - 12$

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

10. $(4w^2 + 6w + 5) - (3w^2 - w + 5)$
 $w^2 + 7w$

Adding & Subtracting Quadratic Expressions (I)

Simplify each expression.

1. $(-4y^2 + 8y + 6) - (-4y^2 + 6y + 3)$

2. $(4t^2 - 3t - 4) + (-2t^2 + 4t - 6)$

3. $(2k^2 + 2k - 6) + (-5k^2 - k - 8)$

4. $(3d^2 + 9d - 6) - (-6d^2 - 3d - 6)$

5. $(-3z^2 - 7z + 3) + (-9z^2 - 7z + 5)$

6. $(-4t^2 - 6t + 2) - (2t^2 - 2t - 2)$

7. $(4w^2 - 5w + 4) + (5w^2 + 5w - 3)$

8. $(-9z^2 + z - 9) - (8z^2 + 7z - 6)$

9. $(-7v^2 - 8v - 1) - (4v^2 - 7v + 2)$

10. $(6f^2 - 5f - 1) + (-7f^2 + 9f - 6)$

Adding & Subtracting Quadratic Expressions (I) Answers

Simplify each expression.

1. $(-4y^2 + 8y + 6) - (-4y^2 + 6y + 3)$
 $2y + 3$

2. $(4t^2 - 3t - 4) + (-2t^2 + 4t - 6)$
 $2t^2 + t - 10$

3. $(2k^2 + 2k - 6) + (-5k^2 - k - 8)$
 $-3k^2 + k - 14$

4. $(3d^2 + 9d - 6) - (-6d^2 - 3d - 6)$
 $9d^2 + 12d$

5. $(-3z^2 - 7z + 3) + (-9z^2 - 7z + 5)$
 $-12z^2 - 14z + 8$

6. $(-4t^2 - 6t + 2) - (2t^2 - 2t - 2)$
 $-6t^2 - 4t + 4$

7. $(4w^2 - 5w + 4) + (5w^2 + 5w - 3)$
 $9w^2 + 1$

8. $(-9z^2 + z - 9) - (8z^2 + 7z - 6)$
 $-17z^2 - 6z - 3$

9. $(-7v^2 - 8v - 1) - (4v^2 - 7v + 2)$
 $-11v^2 - v - 3$

10. $(6f^2 - 5f - 1) + (-7f^2 + 9f - 6)$
 $-f^2 + 4f - 7$

Adding & Subtracting Quadratic Expressions (J)

Simplify each expression.

1. $(8b^2 + 3b - 6) + (7b^2 - 5b - 1)$

2. $(-2n^2 - 9n - 7) - (-3n^2 - n - 6)$

3. $(-2a^2 + a - 9) - (-6a^2 + 2a + 1)$

4. $(-4y^2 - 4y + 2) - (-5y^2 + 2y - 4)$

5. $(5w^2 + 3w - 2) + (5w^2 - 5w + 6)$

6. $(-5h^2 + 2h - 9) + (8h^2 + 2h + 6)$

7. $(-4c^2 + 2c + 3) - (-3c^2 - 2c - 5)$

8. $(-7m^2 + 2m + 1) + (4m^2 + 7m + 9)$

9. $(-8s^2 + 5s - 1) + (2s^2 - 3s + 3)$

10. $(-3h^2 + 3h - 9) + (-3h^2 + 6h - 9)$

Adding & Subtracting Quadratic Expressions (J) Answers

Simplify each expression.

1. $(8b^2 + 3b - 6) + (7b^2 - 5b - 1)$
 $15b^2 - 2b - 7$

2. $(-2n^2 - 9n - 7) - (-3n^2 - n - 6)$
 $n^2 - 8n - 1$

3. $(-2a^2 + a - 9) - (-6a^2 + 2a + 1)$
 $4a^2 - a - 10$

4. $(-4y^2 - 4y + 2) - (-5y^2 + 2y - 4)$
 $y^2 - 6y + 6$

5. $(5w^2 + 3w - 2) + (5w^2 - 5w + 6)$
 $10w^2 - 2w + 4$

6. $(-5h^2 + 2h - 9) + (8h^2 + 2h + 6)$
 $3h^2 + 4h - 3$

7. $(-4c^2 + 2c + 3) - (-3c^2 - 2c - 5)$
 $-c^2 + 4c + 8$

8. $(-7m^2 + 2m + 1) + (4m^2 + 7m + 9)$
 $-3m^2 + 9m + 10$

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

10. $(-3h^2 + 3h - 9) + (-3h^2 + 6h - 9)$
 $-6h^2 + 9h - 18$