

Subtracting Quadratic Expressions (E)

Simplify each expression.

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

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

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

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

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

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

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

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

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

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

Subtracting Quadratic Expressions (E) Answers

Simplify each expression.

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

$$\textcolor{red}{-39b^2 - 56b + 36}$$

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

$$\textcolor{red}{-19c^2 + 11c - 11}$$

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

$$\textcolor{red}{7x^2 - 2x - 7}$$

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

$$\textcolor{red}{-36k + 72}$$

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

$$\textcolor{red}{21s^2 + 25s + 15}$$

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

$$\textcolor{red}{-3t^2 + 72t + 80}$$

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

$$\textcolor{red}{-13v^2 - 24v - 45}$$

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

$$\textcolor{red}{42m^2 + 35m - 31}$$

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

$$\textcolor{red}{-20a^2 + 72a - 44}$$

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

$$\textcolor{red}{6n^2 - 5n}$$